

Journal of the American Society of Professional Graphologists

Welcome to the Journal: A Letter from the President

Thea Stein Lewinson

The Status and Future of Scientific Graphology

Joanna Fancy

Printscript Analysis

Daniel S. Anthony

Evaluation of the Left-handed Writer

Patricia Siegel

Alcoholism and Handwriting

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The Preconscious in Handwriting

Marc J. Seifer

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THE JOURNAL OF THE AMERICAN SOCIETY OF PROFESSIONAL GRAPHOLOGISTS

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PURPOSE OF THE JOURNAL

1. To present theoretical and research papers in scientific graphology according to traditional academic standards.
2. To create a forum for helping graphology gain a wider academic and professional audience in America.
3. To interface with the international professional graphological community.

GENERAL INFORMATION

Manuscript inquiries should be addressed to Marc Seifer, Editor, Box 32, Kingston, RI 02881. Inquiries concerning subscriptions and memberships should be addressed to Thea Stein Lewinson, 9109 North Branch Drive, Bethesda, MD 20817.

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American Society For Professional Graphologists

Welcome and Best Wishes to the New Journal of the

AMERICAN SOCIETY OF PROFESSIONAL GRAPHOLOGISTS

This publication is going to be the first journal of scientific graphology in the United States. It is projected to contain not only articles of handwriting analysis of the highest quality, but also eventually to branch out into other related fields of psychology, e.g., relationship to other test methods, case histories in collaboration with psychotherapists, varied applications of handwriting analysis in business and professional life, the study of foreign alphabets and their usefulness in handwriting work, studies of personalities in history and politics, and possibly occasional articles by well recognized identification experts, etc., etc. Looking at the European scientific graphological journals, one realizes how wide and varied the field can be.

It may be interesting to show here the various handwritings of leading graphologists who established the scientific basis of handwriting analysis. They were collected at a very important event, if not perhaps the most important, because most all of the founders of graphology came together for the first time, and it was perhaps the only time. It was by no means peaceful. Without going into details, many controversies developed. Outstanding was the animosity between Klages and Pulver.

I, as a budding young graphologist trying to establish my work in America and having a few publications to my name, took it all in. It was most exciting, and I learned a lot from the conversations with those leading people and their viewpoints. All these representatives though stressed the "Science of the Expressive Movement" as the basis of handwriting analysis, the multifariousness of graphic indicators and the "Gestalt" of the script. With most of these people, I became friends and stayed in constant contact with them. However, by now, most of them are not alive anymore.

Our purpose here, in this journal, should be to acquaint the scientific community and the public in America with the various aspects and possibilities which the field of scientific handwriting analysis has to offer, and that this type of work must be distinguished clearly from the numerous unscientific endeavors in the handwriting field. We should strive to reach the high level and recognition which the European graphological journals, some of them over 50 years old, have obtained. This is not an easy task, but it can be done. Dedication, integrity and hard work are the ingredients for reaching goals like these.

We will face many difficulties. One of them will be to make a very complex new subject understandable to people who had never thought about the intricacies of handwriting analysis and its possible usefulness. Another difficulty could be the lacking basic graphological literature in the English language. Translations are needed, and they are not easy. We also face a problem to make our Society and

its work known to the graphological community in Europe. Collaboration could be fruitful for all participants concerned. Some of the European journals publish already English summaries at the end of their articles. And it may be desirable for us to publish German and French summaries of the articles in our journal. But this would present again more difficulties and more work.

Right now, however, we are in need of opportunities for research work. Psychologists, physicians and other individuals who are initiating research projects and want to apply a psycho-diagnostic technique to test the subjects involved, could perhaps think of handwriting analysis as a useful tool. This could be helpful for the researchers as well as possibly presenting an additional support to proving the validity of handwriting analysis. These are only some suggestions. Neither Rome was built in one day, nor can we expect immediate complete success for our efforts.

We have to realize that we are at the beginning of a long and hard trail. The European graphologists have made their way and have reached almost complete recognition as a scientific method in business, industry and many universities. We may have to overcome some more obstacles which need not be discussed at this time. Our measurements and evaluations have proven very correct in many instances already here, as our research has proven. And in the Land of Opportunities, where even psychoanalysis has found eventual recognition, why should not scientific handwriting analysis find its proper recognition and application?

Right now, we are optimistic and answer the above question with "yes." The *Journal* should be an important step towards our goals, and we wish it all the success and recognition which the courageous efforts of its editor deserve.

Thea Stein Lewinson

President

January 1989

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Schiff Thea Stein Lewinson
described as follows:

Max Pulver

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Wieser.

J. Crepieux-Jamin

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freundl. send
Roda Wieser

Mr Prof. W. Preyer

Klara Roman-Goldzieher

Anja Mendelsohn

Figure 1. The following names are listed: Max Pulver, Otto Fanta, editor of the journal "Die Schrift", Thea Stein Lewinson, Hans Jacoby, Ludwig Klages, J. Crepieux-Jamin, Roda Wieser, Prof. W. Preyer, Klara Roman-Goldzieher, Anja Mendelsohn. Werner Wolff was also there, but his signature does not appear here (from SELF-KNOWLEDGE THROUGH HANDWRITING, by H.J. Jacoby, J.M. Dent & Sons, London, 1941).

INTRODUCTION

The first issue of the *Journal* represents over 100 years of combined experience by the authors. The president of the Society, Thea Stein Lewinson, has been a leader in the field ever since her landmark text on objectively measuring rhythm in handwriting, *Handwriting Analysis*, was published in 1942. Thea's paper on the handwriting of alcoholics breaks new ground for scientific graphology for it not only suggests a methodology for the longitudinal study of alcoholics, but it also describes primary and secondary characteristics common to their personalities.

Three of the authors, Patricia Siegel, Joanna Fancy and Marc Seifer, were students of Daniel S. Anthony at the New School For Social Research in New York City. One of Dan's most important works, *The Graphological Psychogram*, is still the mainstay of the graphology program at the New School even though Dan has moved to Florida. This remarkable treatise, which greatly expands the work of his mentor, Klara Roman, provides a double-edged measuring tool for studying 40 graphological variables in both a psychological and an objective numerical way. It is, perhaps, the best tool that the graphologist has for analyzing handwriting in a way that can be statistically analyzed for scientific experiments.

Dan's article on printscript explores an area in the field neglected by other writers. As Dan points out, with this coming age of computers, more and more writers appear to be adopting a printscript style, perhaps, in part, to compete with the aesthetics of the typescripted page. Clearly, a new understanding of this mode of handwriting is becoming more of a necessity for the modern-day graphologist.

Patricia Siegel, along with Lois Vaisman, another member of the Society, has taken over Dan's classes at the New School. One of Pat's specialties is the psycho-neurological study of the left-handed writer. The enclosed paper delineates a number of graphic features that are often misinterpreted because the analyst is unaware of the mechanical problems the lefty has in adapting to the handwriting style of the right-handed world.

Joanna Fancy's article on the status and the future of scientific graphology, explores the recurring problems the graphologist has in getting the field accepted in a scientific way. In a recent letter to the editor in the *American Psychologist* on this very same topic for the field of psychology as a whole, and for behaviorism in particular, Pfaus, et al. (1988) call for psychology to begin to "adopt... a formal system for notating movement... in the study of behavior because it allows the physical properties of behavior to be stated objectively in a readily communicable form" (pp. 821-822). Critical of both the mind psychologists for limiting their discussion to subjective criteria, and the strict behaviorists for limiting their definition of behavior to the organism's impact or lack thereof on the environment, Pfaus, et al., suggest that a detailed taxonomy of specific movements "reveal[s] organizing principles of behavior that were previously unrecognized" (pp. 821-822).* Although the authors here are to some extent talking about such topics as instincts and species specific behaviors (neglected by the strict behaviorists), they are also discussing the process of coordination and the neurological basis of overt behavior. Certainly the graphologist seeks to benefit should this viewpoint gain a wider audience.

Ironically, as this issue is going to press, there is a bill in the congress of the state that I am living in, Rhode Island, which is attempting to ban the use of graphology for personnel selection. Ostensibly, the argument is that (1) there is no scientific basis to handwriting analysis, and (2) even if there were, the misuse of this diagnostic tool could potentially injure the rights of persons seeking employment. The second argument, in a sense, has less to do with handwriting analysis, than it has to do with the competence of the diagnostician, and the ethics involved in writing up any kind of analyses, be they by personnel agents, managers, psychologists or graphologists. Thus, only the first issue specifically relates to graphology. As Joanna's article suggests, and as this bill before the state legislature impels us, we as a group of social scientists, must begin to increase the amount of controlled studies validating our field.

There is already a substantial list of published studies achieving this end spanning nearly a century of research in Europe and here in America. Some have been performed by members of this organization, and others have been performed by the major textbook writers in the field (see validation bibliography which follows the opening article). Nevertheless, this is only a beginning. Further, not many individuals are aware of these studies. As our legal advisor Eugene Davidson said at our April 1989 meeting, we must continue to "plant seeds," that is, to reach out to a wider professional audience and seek publishing outlets in other fields such as medicine, neurophysiology, psychology, and law.

The first draft of the last article on the preconscious in handwriting was written by myself while enrolled in a Masters program at the University of Chicago in 1972. I had just left Dan's courses at the New School and was studying theories of personality and also psychoanalysis with Freud's student, the brilliant analyst Bruno Bettelheim. Although Bettelheim was not a graphologist, and would not allow me to discuss graphology for my class presentation, he was amenable to the subject. Attempting to replicate as well as he could the atmosphere of Freud's original teachings, Bettelheim said that the father of psychoanalysis was opposed to projective techniques, such as graphology and the Rorschach, because they were "short-cuts" to the "joint effort voyage of discovery" that the patient and analyst makes as they explore the workings of the patient's mind.

I thought it ironic, however, that Dr. Bettelheim would spend most of the class time with his eyes closed, picking out nuances, resistances and so on, in the voices of his students as he analyzed us as if we were his patients in much the same way that the graphologist analyzes a handwriting. On a walk home from class one day, Dr. Bettelheim said to me that graphology, beyond its rudimentary points, like music or great art, cannot be taught; and in that way, he complimented the field, even though he deprived the class of what I thought to be, an exciting lesson.

Marc J. Seifer

Editor

*Pfaus, J., Blackburn, J., Harpur, T., MacDonald, M., Mana, M., & Jacobs, W. Has Psychology Ever Been a Science of Behavior? A Comment on Skinner. *American Psychologist*, October, 1988, pp. 821-822.

THE STATUS AND FUTURE OF SCIENTIFIC GRAPHOLOGY

Joanna Fancy

ABSTRACT

Graphology has traditionally depended primarily upon abstract reasoning and individual case studies; thus scientific research has provided few statistically validated results. Continued controlled studies and progress in related fields may provide opportunities for gathering further statistical data. Such factual material is essential for the future development of the science.

In *The Structure of Scientific Revolutions*, Thomas S. Kuhn (1962), argues that the social sciences in general are still in what he would call a pre-paradigmatic stage of development (p. 15). Data are collected and systems are proposed to explain the data, but no over-arching theory or paradigm emerges. For any such theory to predominate, it must be demonstrably successful in solving problems and making predictions. It must encompass a broad range of data, and yet it must be precise enough to be tested by experiment.

By this standard, graphology has not yet developed a successful paradigm. We depend on models which we believe describe how the personality works and is reflected in handwriting, but the models are largely untested. This means the most exciting challenges in our field are still before us; also the greatest demand for scientific rigor. It seems appropriate, therefore, to review in general how science develops and in particular the progress of graphology to date.

Every science, in the beginning, is dominated by logic and empiricism. Theories are based on abstract reasoning and specific observations, but there is no way to judge which theories are good and which are bad except by more reasoning and more observation. According to Richard Feynman (1985), the scientific method evolved as a means for weeding out bad theories (p. 308). A good theory, in other words, has to make predictions that come true.

As a science develops, the good theories are gradually consolidated, and a paradigm, a successful overall model of what's going on in the real world, emerges. That's when progress really begins, because, as Kuhn points out, "One of the things a community acquires with a paradigm is a criterion for choosing problems that... can be assumed to have solutions" (p. 37.)

A successful graphological paradigm will undoubtedly grow out of the concept formulated by Wilhelm Preyer in 1895 that handwriting is brain writing. It will have to take into account the universal neurological wiring patterns of the brain, the

unique, genetically determined variations for a given individual and the myriad influences of environment. And it will have to make predictions that come true.

We have some reason to believe that such a complex paradigm is possible, but our ability to make valid predictions is still a long way from a comprehensive analysis of the structure and functioning of personality. Graphological theories of personality still depend to a great extent on logic and empiricism. It may be useful, therefore, to examine these more closely. Each has its uses, and each has its limitations.

Logic is the Aristotelian mode of reasoning. Aristotle (384-322 BC), was once ranked a great scientist, or "natural philosopher," though in modern times he is judged to have had more success in his study of poetry and ethics than of physics. This is because, as Stephen W. Hawking (1988), puts it, "The Aristotelian tradition... held that one could work out all the laws that govern the universe by pure thought: it was not necessary to check by observation" (p. 15). Aristotle believed that non-empirical argument was intrinsically superior to argument from evidence; if an idea was beautiful, coherent and satisfying, it could be assumed to be true and needed no testing.

Only in mathematics can the Aristotelian ideal of pure reasoning be realized, which is why it has traditionally been regarded as the queen of sciences. But it might be more accurate not to think of mathematics as a science at all, at least in the modern sense. It was Roger Bacon (1214-1294), who first defended a preference for experimentation and empirical observation as superior to reasoned explanations. William of Ockham (circa 1300-1349), added the concept of "Ockham's razor," the assertion that the simplest explanation of a phenomenon, the one with fewest assumptions, is the one to be preferred. Francis Bacon (1561-1626), reiterated that inductive is preferable to deductive reasoning, and Galileo Galilei (1564-1642), followed with what is considered to be the first substantial body of experiment and observation in physics.

While there is still room in every scientific specialty for speculation, and while scientific theories will always be valued for their beauty, any field of study other than math which depends on logic without experiment is hard pressed, nowadays, to call itself a science.*

*Editor's note: Mathematics, it can be argued, is an experimental science in that theories are tested according to precise mathematical laws, but they are mental experiments rather than physical ones. Further, there are a number of instances in mathematics whereby abstract theories have found their place in experimental science, e.g., imaginary numbers, such as the square root of negative one, which were conceived of in the 1840's, were eventually used by Einstein's mathematics teacher, Hermann Minkowsky, as a short-cut method to explain the symmetrical relationship between the three dimensions of space and the unitary dimension of time. This development aided Albert Einstein and also Paul Dirac in formulating their various descriptive theories about the nature of space/time and the structure of sub-atomic particles. See *Consciousness and Reality* by Charles Muses and Arthur Young, Avon Books, New York, NY, 1972, and *Thirty Years That Shook Physics* by George Gamow, Doubleday, Garden City, NY, 1966.

If reasoning is not science, still science cannot exist without reasoning, and graphology must not forget or undervalue the work of its great reasoners. In the history of graphology, there have been many brilliant and intuitive Aristotelians, and we still rely on many of their insights; their perceptions still feel beautiful and right.

Thus we accept the idea put forward in Max Pulver's *Symbolik der Handschrift* (1940), that there can be symbolic significance in the three zones of a writing and in rightward vs leftward movements. Since predictions based on this symbolic reasoning have not been successfully tested, we would be unjustified in claiming a scientific basis for it; nonetheless, in individual case studies such reasoning can be helpful. Concepts like rhythm, fluency, and Ludwig Klages' form level or "formniwo," described in *Der Geist als Widersacher der Seele* (1929), are likewise meaningful for the practicing graphologist, even though it isn't easy to test the predictive value of qualities so undefinable. Of course, from the time of Abbe Jean-Hippolyte Michon, in Paris in the 1830's, graphologists have supplemented logical reasoning with empirical data, and hundreds of hypotheses have been derived from individual case studies. For instance, in early graphology, if a long, strong t-bar stood out vividly in the handwriting of a man known for his ambition, the conclusion was drawn that long, heavy t-crossings probably indicate ambition.

Such hypotheses are, indeed, testable and have occasionally been tested. We are all too familiar with the debunking efforts of Hull and Montgomery in 1919. In America, the scientific reputation of graphology is still, unfortunately, based on studies of the over-simplifications and naive literalism of poorly trained graphologists.

Despite its difficulties, empiricism, like Aristotelian logic, is essential to science. A mathematician may invent an entire system out of nebulous assumptions and never worry that there is no correspondence with any physical reality, but any other scientist is obliged to start with something empirical, — a real event or phenomenon, an anecdote, a fact, — and conceive a theory by generalizing from that particular instance.

For this reason, although we no longer believe in a graphology of fixed signs, we must still collect anecdotal evidence, — that is to say, the evidence of individual case studies, — and use it to help us formulate hypotheses.

The next and necessary step is to put our theories to the test. Though we may not say, as Karl Popper does in *The Logic of Scientific Discovery* (1959), "...there is no such thing as induction" (p. 40), induction from empirical data is not sufficient, any more than is deduction by pure reasoning. After logic and empiricism, come validation and confirmation.

Validation is not the same as proof. A good theory is one that withstands many and various tests, but strictly speaking, no amount of validation will ever absolutely prove a theory; one piece of negative evidence may someday arise to cancel the positives out. For example, the theory of inert gases predicted that gases whose electron shells were filled would not form compounds; when, in 1962, Neil Bartlett

combined platinum hexafluoride and xenon and produced xenon fluoride, the inert gas theory had to be discarded.

Since we can never conclusively prove any theory, scientific method is founded on the principle that every hypothesis must be susceptible of disproof. That's why, as Joseph Rychlak (1977) says, "The scientist always restates his hypothesis into the null form" (p. 181). The null form specifies which evidence would refute the theory. Popper (1959) explains, "It must be possible for an empirical scientific system to be refuted by experience" (p. 40). If a theory cannot be tested, that is to say if no test can be devised which it could conceivably fail, it is not science.

In the hard sciences, — physics, chemistry, biology — validating a theory involves predicting the outcome of an experiment. I predict that if I do X, Y will happen; I do X; if Y does not happen, my theory is not true. If Y does happen, of course, that's nice; it tends to validate my theory. But it isn't proof.

In the softer sciences, — psychology, sociology, economics....and graphology, — it's very difficult to devise experiments in which one can arbitrarily change variables [do X], and measure the results. These sciences deal with complex and subtle subject matter and with materials not susceptible to manipulation, whether for ethical or for practical reasons.

Often, therefore, the best that's possible is to observe, make predictions, and follow observation and prediction with rigorous statistical evaluation. Thus, in graphology, I predict that if I see X in a handwriting, I will find Y in the writer's case history; I look for X in many writings; I check for Y in the case histories; if there is no statistically significant correlation, my theory is not true.

In looking for validation of a hypothesis, it isn't sufficient to cite multiple examples in which a generalization seems to hold, because even with the best intentions a researcher is likely to take notice of instances that support his beliefs and ignore those that contradict them.

In fact, there are any number of ways in which one may unconsciously fudge the facts in research; that's why every study should also be subjected to independent confirmation. Unless a result has been duplicated, it should probably not be accepted.

Our best evidence to date of the validity of graphological concepts is that individual graphologists who profess to be relying on them do make valid predictions. It has been demonstrated that a skilled graphologist can make assessments which correlate extremely well with the results of other methods of evaluation: IQ tests, sales success rates, etc. For example, Alfred Binet, originator of the IQ test, conducted the first study correlating evaluations of intelligence based on handwriting with IQ scores. In *Les révélations dé critures d'après un contrôle scientifique* (1906), Binet reported graphological assessments to be highly accurate, — in the neighborhood of 80% for some graphologists, such as colleague J. Crepieux-Jamin. In 1962, Dr. Ulrich Sonnemann of the University of Basel working in cooperation with John Kernan, then chief of personnel at IBM, was equally successful in rating marketing talent. More recently, a 1979 study of my own work

demonstrated a similar level of accuracy in job screening as compared with the 40% success rate achieved using a panoply of other screening methods.

But not every such test of skill has given equally good results. For instance, Dr. Gordon Allport, Harvard psychologist in the 1930's and former president of the American Psychological Association, had to concede that matching experiments conducted by Edwin Powers at Dartmouth achieved results that were "not greatly above chance." Though he felt this poor showing was mitigated by "prevailingly 'good errors' and occasional brilliant successes," he had to concede that "higher validity [remained] unestablished" (p. 7).

Of course, even if we were uniformly successful, this would not prove particular graphological premises correct. Our predictive assessments might be accurate even if we were wrong in explaining how we arrived at them.

This is not to say that nothing of value has been achieved. Essential preliminary research has established, for instance, that handwriting is unique and consistent for a given individual. As Werner Wolff reports in *Diagrams of the Unconscious* (1948), "...graphic movements... have an individual pattern which allows the layman to recognize the individual basis in different appearances" (pp. 179-180). Allport and Vernon, in *Studies in Expressive Movement* (1967), add that "...research studies show handwriting to be a constant over time and stable to a high degree" (p. 246).

Further, some qualities in handwritings may be consistent with other expressive gestures. Allport and Vernon, again, state that "The agreement of graphic movement with gait, gesture, and speech [has been] studied...with results which tend to support the theory that motor activities within personalities are related" (p. 211).

Progress has been made, too, in defining graphological terms reliably. Oskar Lockowandt (1976), in "Present Status of the Investigation of Handwriting Psychology as a Diagnostic Method," sums it up as follows: "The reliability of handwriting on the characteristics level can be considered as proven for the simple measured and ranked characteristics.... Results vary in the more complex characteristics" (p. 27).

In other words, graphologists often agree on the handwriting characteristics they see, especially those which are quantifiable. We should also be able to improve the reliability of complex handwriting characteristics by breaking them down into simpler factors much the way Robert Saudek analyzed various clues for determining speed in a writing in *Experiments with Handwriting* in 1928.

Despite our various successes, however, Lockowandt's survey of content validity research shows a generally low level of correlation coefficients. This may indicate that the successful predictions achieved by Cre'pieux-Jamin, Sonnemann and others may be based on a general correlation between quality of handwriting and overall achievement potential, rather than on any specific correspondences between handwriting characteristics and unique individual behavior patterns or personality.

On the other hand it may simply reveal, as Lockowandt himself says, "a lack of semantic congruence between the evaluations of the writing and psychological criteria" (p. 25). If this is the case, then one would expect more success in studies involving very clear-cut psychological criteria. It should not be surprising, therefore, that the most promising studies seem to deal with extreme aberrations in behavior or personality. For instance, Anita Muhl, in the early 1920's, was apparently able to isolate factors and syndromes predictive of delinquency in the handwritings of adolescents.

In 1965, Maria Paul-Mengelberg found disturbances, possibly attributable to brain injury as well as emotional stress, in handwritings of people who had undergone the severe trauma of POW camps, labor camps and concentration camps. In 1968, C.J. Frederick showed that the handwriting of suicides is identifiable by skilled graphologists. Also, Patricia Siegel and Marc Seifer (1988), have lately had some success with intercoded reliability on independent matching of psychogram scores with the writings of epileptics who had undergone split-brain surgery. In addition, Thea Stein Lewinson (1987), has recently done interesting work on the writings of alcoholics which is described in her article in this issue.

Major changes in psychiatry will undoubtedly provide new opportunities for basic research in graphology. In the most recent *Diagnostic and Statistical Manual of Mental Disorders*, a reference work of clinical diagnosis put out by the American Psychiatric Association, there is a new approach to the issue of personality assessment. The changed diagnostic schema depends on observable behavioral measures not on intrapsychic definitions too often rooted only in accepted dogma. In other words, a diagnosis must now be based on a person's actual symptoms not on an assumption of unconscious conflicts which cannot be directly observed.

One reason diagnostic classifications have changed is that many psychological illnesses are now curable or controllable by drug or electro-convulsive therapy. This means that, allowing for the possibility of coincidental remission or placebo effect, successful treatment tends to validate the accuracy of a diagnosis.

In addition to improvements in treatment and changes in diagnostic formulation, advances in brain research may shortly make even the current enormous gains seem elementary. From the point of view of graphology, all of this may provide a basis for us, with the cooperation of our psychiatric colleagues, to develop a reliable diagnostic methodology, based on handwriting analysis, which might be of value in the practice of psychiatry.

Graphology is more than ready to take advantage of the revolutionary changes going on in psychiatry and neurology. If anything, it has been, until now, a psychometric method of remarkable potential without a valid psychology to measure.

It is for this reason that we must now pause and take stock, to be certain we are prepared for what lies ahead.

In doing individual analyses, we've become accustomed to exploring uncharted and perhaps unchartable waters. Because the human psyche is so full of

contradictions, we avoid predicting behavior and prefer to describe tendencies and impulses which may be latent or unconscious. Such analyses may be right, but they appear to be untestable.

For research purposes, since there is no way that I know of to find and measure an unconscious impulse, we must look for correlations between handwriting factors and actual behavior. The studies cited above are a beginning. Unfortunately, these studies have not yet been expanded or repeated. Indeed, it is sometimes difficult even to find the original work in publication, and many graphologists are unaware of what has been done in our own field.

Three things are needed to correct this situation. The first is an outlet for publication. Though we must strive for a wide audience by publishing in professional journals not devoted exclusively to graphology, we must also collect our work in one superior publication of our own. This will make our accumulating knowledge readily available, and it will give us the opportunity to set proper standards for recognition. These are the aims of this *Journal of the American Society of Professional Graphologists*. In addition to providing for publication, we must seek funding for research. It's possible we will have to produce a more substantial body of work before we can hope for support from established funding sources. If so, that's a challenge we simply must meet.

Finally, we need to develop a consensus about what sort of research needs to be done. It is my contention that our research goal must be to isolate reliably defined factors in handwriting which, separately or combined in syndromes, are predictive of objectively identifiable behavior patterns.

As we struggle to define an over-arching theory of how the personality works and is expressed in handwriting, it is reassuring to know that such a paradigm need not be perfect. As Thomas Kuhn says, "...no theory ever solves all the puzzles with which it is confronted at a given time; nor are the solutions already achieved often perfect. On the contrary, it is just the incompleteness and imperfection of the existing data-theory fit that, at any time, define many of the puzzles that characterize normal science. If any and every failure to fit were ground for theory rejection, all theories ought to be rejected at all times" (p. 146).

To create a useful paradigm, we have to build on solid statistical results. We need not abandon intuitive Aristotelian formulations, neither need we give up conjectures evidence derived from individual case studies, but we must formulate hypotheses in a manner susceptible of disproof, and then we must test them and re-test them and when the facts contradict them, we must rethink.

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BIOGRAPHY: Joanna Fancy received her graphological training with Dan Anthony at the New School For Social Research in the early 1970's. She is a founding member and on the board of The American Society of Professional Graphologists and is editor of their newsletter. Joanna has been a professional graphologist for sixteen years, screening candidates for management sales and consulting positions. She has also conducted intensive psychological investigations of the handwritings of psychiatric patients and alcoholics, working closely with Katherine Falk, M.D., of the College of Physicians and Surgeons at Columbia University and William T. Davis, Ph.D., Social Psychologist at the Bronx Veteran's Administration Medical Center.

GRAPHOLOGICAL REFERENCES CONTAINING VALIDATION STUDIES: A CHRONOLOGICAL BIBLIOGRAPHY

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The list is by no means exhaustive, but merely representative of the range of graphology studies performed during the last century. Refer to James H. Miller's (1982) *Bibliography of Handwriting Analysis*, which contains over 2300 references or to the Handwriting Analysis Research Library (HARL), located in Greenfield, Massachusetts, which has over 86,000 entries. A * next to a reference indicates that it is a major textbook in the field.

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Bibliography compiled by M. Seifer.

A Graphologist's Dilemma: Through the Ages-A new approach to the
psychological diagnosis of an increasing number of practitioners in the modern
world

Author's Anthology

With sincere appreciation and gratitude to her suggestion of the subject and her timely assistance during the preparation of this paper

To the memory of my wife

Florence E. Anthony

PRINTSCRIPT ANALYSIS

A Graphologist's Dilemma Through the Ages: A new approach to the psycho-diagnosis of an increasing number of printscripters in the modern world.

Daniel S. Anthony

With sincere appreciation to Almut Crosslin for her suggestion of the subject and her untiring organizing skill in the preparation of this paper.

To the memory of my wife

Florence B. Anthony

ABSTRACT

Because more than a third of the applicants at a large industrial corporation in the United States preferred printscript over cursive writing, this author felt it necessary to alert world graphologists to the importance of accurate printscript evaluations.

INTRODUCTION

The historical origin of man's first attempt at written communication has been found in the printed characters best adapted to chiseling on stone plates by the Phoenicians, Sumarians and Etruscians. Early Chinese pictographic representational symbolism was incised in clay in a more fluid and rounded manner.

With the advent of Leonardo's Italic cursive, and the more widespread use of handwriting as a rapid means for communication, letters became more connected. With connection, elaborations became more frequent, like the calligraphic, pictorial scripts of the intellegentsia of the Italian Renaissance, so beautifully depicted in the book *Sweet Roman Hand*, by Wilfrid Blunt.

But even now, the first writing every child in the western world learns is block cap followed by manuscript. In the second or third grade, one is then taught to connect letters and learn to write cursively. However, at an indeterminate stage in every person's life, he or she may opt for a preferred printscript rather than the cursive copy book style that was taught as the preferred transition writing.

BACKGROUND

Since 1960, when I began teaching graphology at the New School For Social Research in New York City, I have been concerned about the reluctance of the great authors of books on handwriting analysis to tackle the enigma of the printscript writer. Therefore, I had slides made of all the printscripters in my files, famous or unknown, to acquaint my students with the growing necessity to learn more about analyzing these rejected members of our society. From this research, I can say that the a priori assumption that printscripters have chosen for sinister motivations a style of writing that presents a deceptive or distorted facade of their true personalities is unfounded.

Fortunately, the files I have accumulated through my personal and industrial practice over the past 30 years have supplied me with the evidence needed to support these early assumptions. At the same time they have also provided material necessary for teaching other graphologists how to become experts in the analysis of printing. With the increasing use of computers and word processors and the diminishing emphasis on Palmer method and other copy book standards, it is possible that the need for cursive writing speed may diminish. Forced to compete with these mechanical models for legibility and simplicity to communicate, the written message of the future may increase towards a block printing.

WHAT CONSTITUTES A PRINT SCRIPT WRITING?

Webster's dictionary defines ORTHOGRAPHY as "the art of writing words with the proper letters according to standard usage; correct spelling; also mode of spelling." It generally refers to printed symbols. The word stems from the Greek "ortho" or correct, and "graphien" to write. So, a printscript writer is one who gravitates towards, prefers and chooses an orthographic style in which the majority of letters are separated and/or printed in the manuscript mode or block capital printscript alphabet of the country of origin.

WHY ONE CHANGES TO A PRINTSCRIPT

The following questions were given to a large number of printscript writers to determine why they adopted the orthographic style.

1. Do you recall when you changed from cursive, connected, copybook writing to a preferred printscript? Approximately how old were you?
2. Why did you make the change? Can you state all the reasons for the shift.
3. Why do you prefer print to cursive writing?
4. Did any one or more persons influence your transition or was it your own decision?
5. Are there any other reasons you can think of?

After reviewing their responses, the following findings were revealed.

1. About 1/3 of the population of my professional clients prefer printscript over exclusive use of cursive writing.
2. Many thought their cursive writing was illegible to them and to others. As the purpose of writing is to communicate, these people attempted to maximize this goal.
3. Many disliked the ugly, chicken-scratch appearance of their copy book cursive model of writing.
4. Some left handers found it manually difficult to conform to the left-to-right practice of moving against the grain of his or her genetic neuro-muscular, psycho-motor impulses. This was also true for some right handers. In other words, they felt more comfortable controlling legibility and letter formation through printing as compared to writing.
5. An unconscious fusion of two or more of the above factors may have triggered the transformation from cursive to printscript handwriting.

A STATISTICAL EVALUATION

The following study was conducted based upon 278 industrial employees and personnel candidates from Polycast, a Fortune 500 plastics corporation.

Significant Findings:

1. 100 or 36% of the heterogeneous population chose printing as the preferred mode of written communication.
2. This group achieved scores on the Anthony 14 factor character and personality scale generally higher than cursive writers.
3. 16%, or 16 of the printers were women.
4. 02% of this female group are left handed writers.
5. 84% or 84 of the printers were male.
6. 15% of this male group are left handed writers.

THE USE OF BACKGROUND INFORMATION BY THE GRAPHOLOGIST

Many disciplined graphologists from the old school of conventional wisdom are reluctant to request personal information about subjects, and criticize use of such information. My answer to critics over the past 30 years is as follows: No professional graphologist should ever be forced to speculate on, guess about or attempt to extrapolate necessary vital statistics from the handwriting alone. Not only must the professional know the gender and hand with which the subject writes, he or she must also know the age, height and weight, educational background, last position, highest previous salary, country of origin of writing style, marital status and number of children.

The goal of the professional graphologist, is to accurately evaluate the hand-writings of clients. It is not to prove that graphologists can discern something about a person without having access to any personal data. That goal is for a scientific study on the validity of graphology (of which there are many). Through the years, I have encountered only three commercial clients who questioned my right to information on vital statistics.

All the personnel managers and executive corporate officers of the companies for whom I do analyses are instructed to offer a variety of pens and pencils which subjects may use, if they do not have their own favorite instrument with them. The subjects are also given a magazine and told they must place it under the form they are filling out. Vital statistics are received through the questionnaire form that they fill out and by access to their vita. Through telephone communication and follow-up studies I have calculated my success rate in analyzing handwritings for corporate clients at above 85%.

THE ANALYSIS

All evaluations were based upon the the Anthony 14 item standard scale. Other factors were also taken into consideration such as the Psychogram, the 9 signature protocol page, diagrams of the unconscious and touchpoint analysis. As stated above, the vita of the client was also utilized.

THE ANTHONY 14 ITEM STANDARD SCALE

Through working with corporate clients in the field of personnel selection, the following 14 factors comprising a personality inventory were isolated:

1. Self starting capacity
2. Adaptability and trainability
3. Self confidence with ego drive
4. Communicating skills
5. Enthusiasm and persuasiveness
6. Purposeful intelligence
7. Emphatic intuition
8. Flexibility and spontaneity
9. Perseverance and resilience
10. Dependability and responsibility
11. Competitive-aggressive drives
12. Resourcefulness and ingenuity
13. Dominating dollar drive
14. Motivation for success

Each factor is graded on a percentile basis, and a succinct explanatory phrase referring to aspects of the handwriting is included.

EXAMPLES**THOMAS**

Figure 1 is our first unusual mixed style writer. His name is Thomas, and he is a 36 year old traffic controller for warehousing of inventory. Line 1 depicts a block cap printed name and a cursive signature. On the second line note that a cursive e is placed in the block cap word CHARTER. This automatic cursive slip would place the writer into the mixed type category. Line 3 depicts traditional American copybook penmanship block capitals for the letters MBA.

Line 4 contains the word Consultant. It consists of an unelaborated, block cap C, followed by a well spaced, modestly articulate small o; followed by an equal sized block cap printed n; then an artistically modified block cap s, followed by a most economical u, and then the equally tall, sparse manuscript lt, each of which slants slightly to the left of the perpendicular. The middle zone is comprised of mixed sized block cap letters except for a lowercase t which has a modest, yet forward pushing crossbar at the same relative height as the rest of the letters of this zone. The final letters are all horizontally expanded, and block cap. The sense of professionalism Thomas feels about being an MBA consultant, is symbolized by the rather strongly designed, orthographic terminal T bar.

The word married on line 5 is made up of block cap letters, except for the drawn letters ie, which are manuscript or detached cursive. Cursive writing can also be

seen on the first word of line 6. The w of why is round, garlanded, and contains the double u structure of the cursive with the second u broader and more horizontally expanded than the first angled u of the w. The h is simply designed, book print model; and the y is formed like the cursive, with an unusual, beginning up stroke which persists throughout the remainder of this content page. All three letters of why follow a back hand slant of about 2 degrees left of perpendicular.

The personal pronoun I on line 6 consists of two dominating and expressive horizontally expanded bars which enclose the subordinated, rightward concave I staff in an almost mothering and umbrella-like protective shield. Note also that the writer adapts the same 10mm interword spacing before and after the cap I unconsciously balancing their placement.

Moving on to the word would, the double u garlands which compose the w seem to be symbolic of the manner in which he modifies block cap intentions into quasi-cursive realities. The three lower case letters oul, are economically simple manuscript letters followed by an open looped, cursive d, again indicating a mixed type.

Tom's propensity towards an involuntary, if not unconscious mixing of block-cap, manuscript and cursive orthographies is depicted in the following word, like. L is a block cap with a convexly rounded horizontal transverse on the base line. Note the height of the block cap L in relation to the heights of the d of would, the i dot and the heights and the base line placement of the word to. Use of a ruler demonstrates interword touchpoint diminuendo reminiscent of the similar graphic in the word CHARTER above. Here we see a display of a diagram of unconscious, intuitive aesthetic organizing talent.

Staying with the same word, the lower case i, has the dot placed along the touchpoint axis suggesting that the d of would and the following word like were written in one continual motion. This hypothesis is supported by the connected ke which are two letters symptomatic of his natural drift into effective letter linkage. The simply drawn cursive e allows him to end the word with a modest garland terminal stroke.

The following word, to, is a rare example of consistent equal-sized letter combinations. More often than not, his to words are manuscript and cursively connected.

I have selected the word ADORNS as an acronym to alert the graphologist to the special orthographic significance of these letters in the random, pell mell unconscious choices of word formation this writer selects. Examine the structure of the word ideas, line 20. This cursive printschrift is a succinct articulation of an artistically simple graphic expression.

PLEASE COMPLETE THIS PAGE IN YOUR OWN HANDWRITING

1 PRINT NAME THOMAS R SIGN NAME Thomas R
 2 ADDRESS 5 CHARTER DR DATE 4/23/87
 3 MALE FEMALE AGE 36 YEARS EDUCATION M.B.A. RIGHT HAND LEFT HAND
 4 HEIGHT 5'6" WEIGHT 157 LAST POSITION Consultant HIGHEST SALARY \$63,000
 5 LEARNED TO WRITE: STATE/COUNTRY N.Y. / U.S.A. MARITAL STATUS Married # OF CHILDREN 2

PLEASE WRITE, OR PRINT IF YOU PREFER, AT LEAST 150 WORDS ON "WHY I WOULD LIKE TO WORK FOR THIS ORGANIZATION," OR "WHAT I WOULD MOST LIKE TO DO IN THE FUTURE AND WHY."

6 Why I would like to work for this organization
 7 ORGANIZATION
 8 AT this point in my career, I am looking to satisfy some personal goals. Both professional and
 9 monetary. I feel Polycast, being a small growing company
 10 will afford me the opportunity to make significant contribution
 11 to achieve my goals.
 12
 13 I will bring my technical skills (Chemical Engineering
 14 degree) and M.B.A.) as well my management experience
 15 (over 11 years with a Fortune 100 company) to meet the
 16 challenges facing all growth companies.
 17 Polycast also offers an environment to be creative
 18 in implementing new programs, which allows an individual
 19 to take "risks". It is a "people" company operating
 20 lean which means new ideas and programs can be
 21 implemented quickly avoiding procrastination.
 22 More importantly, Polycast offers the potential for
 23 a successful person the opportunity to advance quickly in the
 24 organization. This means taking on more responsibility and
 25 greater involvement in the decision making capacity
 26 I am sure Polycast and myself, will make a good
 27 professional marriage.
 28 Thomas R

COPRIGHT 1967 DANIEL S. ANTHONY

1: Handwritten job application. Note mixing of cursive with printscript.

Printscript Analysis

**PSYCHOLOGICAL EVALUATION
OF PERSONALITY FACTORS
- FORM A -**

Name Thomas R Age 36 Sex M Right X Left _____

Applicant for Traffic Control & Warehousing

Company Polycast Technology Corporation

Date April 24

PERCENTILE SCORE

PERSONALITY FACTORS		
1. Self starting capacity		
	<i>Versatile, varied and imaginative.</i>	
	<i>Quick in crucial decision making</i>	90 A
2. Adaptability and trainability		
	<i>Knows he is super sharp and can adjust to any and all production problems: Tops.</i>	93 A
3. Self confidence with ego drive		
	<i>A rare combo. Looking for ever greater chances to prove his stuff</i>	92 A
4. Communicating skills		
	<i>A sophisticated, upwardly executive team, creative articulator</i>	91 A
5. Enthusiasm and persuasiveness		
	<i>Both exude instinctively in a practical, productive, industrious process: innovative.</i>	89 A
6. Purposeful intelligence		
	<i>Every thought and decision he makes flow from a life style of self worth</i>	94 A+
7. Empathic intuition		
	<i>Knows he's especially sensitive and egocentric. Focuses on psycho-problems.</i>	87 A-
8. Flexibility and spontaneity		
	<i>Zeros in on company and people problems with equal acuity. An all-around operator</i>	88 A-
9. Perseverance and resilience	84	
	<i>Will persevere if his growth is constant.</i>	
	90	
	<i>Feed him as much exec. trouble as you can</i>	86 A-
10. Dependability and responsibility		
	<i>Great, so long as he advances and is praised.</i>	
	<i>Needs approval for his stellar competence.</i>	85 B+
11. Competitive-aggressive drives		
	<i>Tremendous, has to be first with the most in any duty he takes: a fighter</i>	92 A
12. Resourcefulness and ingenuity		
	<i>Abundant, will soon believe he must become president of Polycast on creativity alone</i>	95 A+
13. Dominating dollar drive		
	<i>Knows he is worth a lot and should work hard to make big profits for Polycast</i>	87 A-
14. Motivation for success		
	<i>Superior, will be inspirational role model for his team and colleagues.</i>	93 A
Personality Score		
	<i>An excellent choice for this position</i>	90 A

REMARKS ON APPLICANT *Just keep him inventively busy and working his ass off to get his next promotion. The grass is always greener on the other side of any corporate fence in which he is hemmed.*

Copyright 1966 Daniel S. Anthony

2: The Anthony 14 point personality factor scale.

PAMELA

When I did my first evaluation of Pam K. in December of 1987, she had been working for over a year as assistant manager of the customer sales department for a publishing company. She is a graduate of a marketing program from a state university in New York, and has expertise in computers and with the Lotus program.

Note the palpable variations in size, signatures and style of printing in Figure 3. Referring to the top lined section, we note an exceedingly fluent and mature block cap printscript as compared with the relatively low form level cursive writing beneath. For instance, note in the block cap word SINGLE, line 5, the creative and energetic s, simplified g, upward thrust of the latter part of the word and enthusiastic extension on the e. Compare this graphic expression to the cursively written word education on line 7. Like other cursive words down the page, this word appears stagnant and slowly written. Overall, lateral strokes are weak, the slant is inconsistent, and the pace is arhythmic as compared to the block cap words.

Why would anyone so bright as demonstrated in her high form level orthographic script resort to a more mundane and conventional graphic means of expressing her thoughts and feelings?

I did not resolve the riddle until June of 1988 when I received 10 photocopy pages of the libidinously creative and liberated woman which, although a printscript, is really the cursively connected and self actualized true picture of herself, Figure 4. This late specimen is the naturally expanded graphic expression of her productive personality and unique character. Note in particular the connectedness and dynamic flow on line one, on the word along; the highly simplified th combination in with, line 2; and the exciting use of the Greek e which blends well with the overall design of the script. Lateral strokes are now also expanded. See the t-bar of point, line 4. In telephone calls to her, I suggested that she might soon begin to recognize her full innovative potential if she practices converting her ambivalent cursive signature into her easily connected block cap style.

HERBERT

Figure 5 contains the handwriting of Herbert Engelhardt, one of the brightest men I have ever known. Herb is a businessman and also college professor at New York University. One of his most significant achievements has been the ability to take a the Polycast Corporation which was \$30 million in debt and turn it around into one with assets of over \$500 million dollars. He is a highly educated renaissance man, knowledgeable in both the world of art and literature and the world of corporate high finance. As a business person he can be hard-nosed tyrant at times, and also one of the kindest of men.

If we look at his printed name on line 1, note that it is cursively connected between all letters except the air stroke linkages between his cap E of Engelhardt and the following N and between the H and A of his family name. His signature on this same line is totally linked between all letters even including his first and last name. This

PLEASE COMPLETE THIS PAGE IN YOUR OWN HANDWRITING

1 PRINT NAME	PAMELA A K	SIGN NAME	Pamelakk					
2 ADDRESS	DELL #6	DATE		12/8/87				
3 MALE	<input checked="" type="checkbox"/>	FEMALE	X	AGE 31 YEARS EDUCATION 15	RIGHT HAND	X	LEFT HAND	
4 HEIGHT	5'2"	WEIGHT	125	LAST POSITION	SUPERVISOR / PRODUCT COORDINATOR	HIGHEST SALARY	\$16,000 ann.	32,000
5 LEARNED TO WRITE: STATE/COUNTRY	NY	MARITAL STATUS	SINGLE	# OF CHILDREN				
6 PLEASE WRITE, OR PRINT IF YOU PREFER AT LEAST 150 WORDS ON "WHY I WOULD LIKE TO WORK FOR THIS ORGANIZATION," OR "WHAT I WOULD MOST LIKE TO DO IN THE FUTURE AND WHY."	(customer service coordinator)							

7 My attitude towards education has always been
 8 positive, although education in the traditional
 9 sense hasn't always held my interest. I enjoyed
 10 a variety of subjects in high school including
 11 chemistry, math, psychology, literature. By the
 12 time I entered college my strongest interests
 13 focused more on art history + oil painting.
 14 After 3 yrs of college I felt more interested,
 15 in working + living independently, so I dropped
 16 out and moved to Vail, Colorado.

I always had the support of my family, although it varied according to their personal feelings on what I chose to do with my life.

I tend to go the route which presents the greatest rewards and challenges, and this is why I am so happy at Polycast.

SIGNATURE

Pamelakk

P.S. not enough space for all the information you requested!!!
COPYRIGHT 1987 DANIEL S. ANTHONY

Figure 3: The printing at the top is more dynamic than the handwriting.

Pam K's Printscript

WITHIN ADEQUATE STAFFING, ~~WORKING~~ WITH OUR ONGOING TRAINING PROGRAMS WE HAVE BEEN ABLE TO ~~CREATE~~ REDUCE PARTIAL LATES & CREDITS TO THE POINT WHERE I CAN CONFIDENTLY SAY MY GOAL FOR CERTAIN TYPE OF CREDITS & PARTIALS IS ZERO OVER THE NEXT 3 MONTHS.

AS THE DEPARTMENT FINED OUT, I WAS ABLE TO IMPLEMENT SOME NEW PROGRAMS TO BENEFIT THE CUSTOMER AS WELL AS THE COMPANY.

THE FOLLOW UP ^{CARD} PROGRAM SERVED AS A TESTING GROUND FOR OUR CURRENT RECOMMENDATION PROGRAM. IT WAS INTENDED TO BE A SIMPLE YET EFFECTIVE WAY TO MAKE SURE WE LEFT NO MONEY ON THE TABLE AT THE END OF EACH DAY.

ON A WEEKLY BASIS THE REPS ~~WEEKLY~~ LOOKED BACK THROUGH THE QUOTE BOOKS AND EVALUATED ANY QUOTES THAT HAD NOT BECOME ORDERS. THEY WERE ADVISED TO CHECK FOR IMPROVEMENTS IN DELIVERY, AVAILABILITY OF STOCK, TRUCK SCHEDULES EVEN EXCESS INVENTORY BEFORE PLACING THE CALL. ⁽¹⁷⁾ THE DESIRED EFFECT WAS ~~ALWAYS~~ ^{ALWAYS} ACHIEVED.

FIG 4

4: Note the connected and dynamic flow of the printscript. Compare to Figure 3, who is the same writer.

PLEASE COMPLETE THIS PAGE IN YOUR OWN HANDWRITING

PRINT NAME Herbert Engelhardt SIGN NAME Herbert Engelhardt
 ADDRESS 10 Downing St NYC 10014 DATE 21 May 88
 MALE FEMALE AGE 65 YEARS EDUCATION MBA RIGHT HAND LEFT HAND
 HEIGHT 5-8 WEIGHT 160 LAST POSITION TEACHER HIGHEST SALARY 100++
 LEARNED TO WRITE: STATE/COUNTRY NJ USA MARITAL STATUS DIV # OF CHILDREN 2

PLEASE WRITE, OR PRINT IF YOU PREFER, AT LEAST 150 WORDS ON "WHY I WOULD LIKE TO WORK FOR THIS ORGANIZATION," OR "WHAT I WOULD MOST LIKE TO DO IN THE FUTURE AND WHY".

I love teaching because it involves the mind & the psyche in ways that business doesn't. The students are not always as smart as I would like them to be, in fact, sometimes, they're downright unpleasant; being entered & geographically ignorant of many or the most necessary structures underpinning our society.

But when at the end of a semester, several of them come to me and say that my course has been the only educational experience of their college experience, or that my course was the most challenging, stimulating and potentially useful one they have ever had. Then it all seems worth the trouble.

SIGNATURE

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Figure 5. Note cursively connected printscript at top and high for level normal cursive writing at bottom

propensity toward letter connections is repeated in both of the content specimens he has written at our request. Lines 2 to 12 contain his printscript request specimen, while lines 13 to 19 represent his requested cursive handwriting. It is my opinion that both of these specimens are superior in the quality and unconscious form level expressiveness. In high level handwritings, when we find that the print script does not differ too much from the cursive, we also find evidence that there is a higher degree of emotional/intellectual stability in a psychoanalytic sense. I believe also that any professional graphologist comparing these two modes of handwriting should be able to evaluate the printscript with great accuracy, even though the printed forms are not this writer's preferred method of communication.

CONCLUSION

If the graphologist can become as confident of his analytical printscript expertise as he has been with his ability to master the conventional wisdom evaluating cursive handwritten specimens, we will be far better equipped to master the challenge facing all of us as we approach the 21st century of word processors and computers and who knows, what other invention to eliminate the use of the handwritten word.

BIOGRAPHY: Daniel S. Anthony received his B.A. degree from Brown University in 1935. For the years 1961-62, Dan was a Ford Foundation Research Fellow at Rutgers University, Urban Studies Center in criminology, sociology and psychology. He began teaching graphology at the New School For Social Research in 1959 and expanded Klara Roman's courses to a seven semester program which he taught with his wife, Florence, up until their move to Florida in 1980. Dan has also lectured on the topic at Harvard, Princeton, and New York University, at the National Convention of the American Psychological Association in New York in 1966 and the First International Congress of Handwriting Experts in Amsterdam, Holland also in 1966. Featured in the *Wall Street Journal*, *Glamour*, *Newsweek*, *Vogue Magazine* and the *New York Post*, Dan's publications include "Graphology" in *Taboo Topics*, N. Farberow, Ed., Atherton Press, 1963; "Is Graphology Valid?" *Psychology Today*, August, 1967; "Diagrams of Unconscious Configurations in the Execution of the Signature" in *Experiencing Graphology*, Freund Publishing House, Tel Aviv, 1989; and his textbook *Guide to the Psychogram*, New School For Social Research, New York, first published in 1964.

EVALUATION OF THE LEFT-HANDED WRITER

Patricia Siegel

ABSTRACT

Evaluating the writings of left-handers often presents difficulties for analysts because the left-oriented approach to the page can distort the interpretation of common graphics. The direction of many school-taught writing movements runs counter to what is comfortable for left-handers, and they must learn to adjust. The manner in which left-handers compensate for these directional differences is a generally unconscious process, but the choices they make reflect their behavior patterns in adapting to real world situations.

A considerable number of left-handers have difficulty accommodating their graphic perspective and movements to the "right" way of writing. These individuals may have handwritings that demonstrate inferior rhythm as they push the pen rather than pull it to the right. They may also have to change the pen and paper hold to come out with a result which is acceptable to them. Many have difficulty, for a variety of reasons, making fluid letter forms and connections.

In analyzing any left-hander, the graphologist should segregate those graphics potentially influenced by the left approach to the page versus those that would be comparable for either the left or right-hander.

Left-handed writings can be analyzed according to traditional graphological principles of gestalt analysis. But the analyst should be also aware of possible distortions which can exist. In particular, left-handers normally have a greater proportion of left trends in their writing. Other distortions may occur in the following graphics:

- a. arhythmic upward movement of lower zone connections to the right;
- b. a tendency to print;
- c. a more left-inclined slant;
- d. greater variability of slant;
- e. downward slope of alignment;
- f. a tendency towards arcades; as well as
- g. greater displaced pressure on the horizontal axis.

As a result, there are situations in which right-oriented graphological interpretations may be compromised when analyzing certain left-handed writings. Preliminary observation of the potentially distorting elements listed above should also take into account whether there is easy articulation in the flow of the writing or, instead, a considerable effort or struggle associated with the writing process.

The expressive quality of the handwriting as a whole has to be evaluated in order to determine the degree of adjustment. The greater that adaptation, the more the left-hander's writing can be analyzed by traditional standards.

There are several features which reflect such a right orientation:

- a. The aesthetic and rhythmical contraction and release patterns are most significant.
- b. "t" and "A" cross bars which go from left to right show an ability and inclination to follow the school-copy model.
- c. Circular graphics such as "o" or "8" which are drawn with a counter-clockwise movement are supplemental features demonstrating a rightward psychological approach.

Left-handed writings which are awkward or exhibit the struggle indicated above may reflect minimal neurological impairments or possible hemispheric competition. The theory of hemispheric competition implies some coordination deficiency between functions of the left and right hemispheres of the brain. The individual's ability to form integrated writing patterns may be affected by any kind of neurological problem, even if it is only slight. Graphic indications of such problems include:

- a. Lack of control in the stroke or atactic movement;
- b. Severe variability of slant;
- c. Excessive or inconsistently applied pressure;
- d. Numerous mistakes (particularly in the beginning of words);
- e. Spelling errors in simple words.

If there is some indication of difficulty in producing acceptable script patterns, the graphologist should observe whether the writer attempts to compensate. Does he or she make an effort to conform to school copy letters, slant or other features even when their execution is difficult? Are new or modified forms or other devices created in an attempt to reduce the effect of awkwardness? There may be indications that the writer has better functioning potential than strict traditional interpretation of graphic indicators would otherwise imply. Right-handed writers who were switched from using their left hand early in life may also exhibit awkward movements and compensating tactics while writing.

Many aspects of visual and symbolic orientation are similar for both the left and right-hander. The "right" direction, for instance, represents the future and goal orientation for everyone in Western culture. Other elements having common symbolic connotations include:

- a. Spatial organization (in margins and between lines and words);
- b. Sizes;
- c. Symbolism of up, down and upper, middle and lower zones;
- d. Dynamics of speed, angle and curve;
- e. Visual orientation towards conformity versus individuality;
- f. Significance of the signature in relation to the text.

PLEASE COMPLETE THIS PAGE IN YOUR OWN HANDWRITING

PRINT NAME Robert L. Jr. SIGN NAME R. L. Jr.
 ADDRESS DATE 3/28/86

MALE FEMALE AGE 25 YEARS EDUCATION College RIGHT HAND LEFT HAND

HEIGHT 60 WEIGHT 210 LAST POSITION Logistics Support Analyst HIGHEST SALARY \$36K

LEARNED TO WRITE: STATE/COUNTRY NYC MARITAL STATUS Single # OF CHILDREN 0

PLEASE WRITE, OR PRINT IF YOU PREFER AT LEAST 150 WORDS ON "WHY I WOULD LIKE TO WORK FOR THIS ORGANIZATION," OR "WHAT I WOULD MOST LIKE TO DO IN THE FUTURE AND WHY."

It is very difficult to say on a first meeting with a company why one would like to work for it. In my case I would prefer to digest the events of the day & make the decision, for my decision to work here would be at a bank point. My career & would have to be made very carefully.

At a glance, since I have been asked to, I feel I would like to work with because of the people I have met so far. I have met people who each have the same commitment to the success of this company. People are its main resource, & it seems that the company has been lucky in finding the people here. (Some company's feel they're there for the people, others are vice versa. They are only 1/2 right - IT's symbiotic!)

Bob [Signature] has some problems. They feel he can't solve, and if they are the same problems & perceive it can. D. L. says his is a pressure job. I agree, my experience has been in pressure situations. I helped set up a \$85 million facility in less than 3 yrs.

Bob is Mr. leave solving problems or symptoms? I think both and that is a good position for job satisfaction, which is what one needs in a job.

It may be difficult to differentiate between graphic disturbances which are psychological and those which are neurological in origin. There is, however, an interplay between the physical and emotional forces in a personality which has to be taken into account when developing a handwriting analysis. These forces cannot be completely isolated. The individual's motivation and degree of success in adjusting to a difficult physical process can provide the kind of compensation which enhances potential and overall ability.

ROBERT: A LEFT-HANDED PRINTSCRIPT WRITER

Robert's handwriting has to be specially evaluated both as a printscript and as a left-handed specimen. As indicated above, left-handers have a greater tendency to print than do right-handers, principally because the left hand for most people goes against the grain of the paper as it proceeds across the page.

Robert executes this left to right writing process awkwardly. There is greater than average left-trend, a left slant and the choice of a printscript which symbolically avoids the horizontal connection. The displaced pressure is an additional reflection of this awkwardness and of a combination of physical and psychological adjustment problems. Other elements, such as irregularities and distortions in some forms are not specifically lefty related and can be evaluated by traditional graphic standards.

The overall expressive quality of the writing demonstrates Robert's effort to make an impression with self-conscious stylization that is neither comfortable nor natural for him. The writing dynamics suggest conflicting emotional elements which do not show sufficient integration to allow consistent application of productive energy.

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TenHouten, Warren, Seifer, Marc, and Siegel, Patricia. Alexithymia and the split brain: Evidence from graphological signs. *Psychiatric Clinics of North America*, (Special issue on hemispheric specialization), September 1988, (11), 3, 331-338.

BIOGRAPHY: A graduate of Cornell University, Patricia Siegel began her training in graphology in a five year program with Daniel S. Anthony and his wife Florence, at the New School For Social Research. In 1978 Pat became a teaching assistant, and in 1980, she took over the entire 8 semester program with co-teacher, Lois Vaisman, when the Anthony's retired. This fully accredited college program

includes courses on the psychology of handwriting, personnel selection and also questioned documents. Pat is a handwriting consultant and questioned documents expert. Her publications include a co-authored study of the handwritings of the split-brain epileptic patients published in *Psychiatric Clinics of North America* in 1988; and "American Left-handed Writings in *Experiencing Graphology*, Freund Publishing House, Tel Aviv, in 1989. This last article represents a lecture Pat gave at the International Congress in Graphology held in Jerusalem in 1985.

This is the first time I have had the opportunity to speak about my work with alcoholics. This subject seems common sense, but it is not. It deals with extremes in upper and lower zone scripts, in freedom of letters, as well as disturbance of rhythmic organization and other factors. The handwriting samples based on material obtained before and after the drinking period illustrate a disturbed, sensitive self-image. Handwriting analysis provides a unique means for demonstrating the development of conditions during the course of the disease.

ALCOHOLIC WRITING

Alcoholism and handwriting are inextricably linked. As a best proof of this is that there is virtually no literature about it at any rate. I have been unable to find any in America. You can search the books and in any of the German journals in the last five years. A few months ago, York kindly gave me some handwriting of alcoholics and wrote down some of something in common in these samples. Please inform me if you have some information, as I believe this is not so simple. There is Washington who is a psychologist, Dr. J. Martin Kuehner, who specializes in alcoholics and drug addicts and is in close cooperation with Alcoholics Anonymous. He provided me recently with script material, but also with items of information about alcoholics which is extremely essential for the understanding of these scripts. I would like to show them to you, since some patients with me, I discuss something of this sort in a rather general context before I move on to the analysis of the handwriting samples. However, I should like to say something in anticipation:

1. The handwriting samples are so diverse in form that it appears impossible to find something in common.
2. The handwriting examples often deteriorate to such a high degree during the period of acute alcoholism that one can scarcely find anything characteristic in them.

Through Alcoholics Anonymous we work principally with recuperating alcoholics, from whom we obtain examples of handwriting. These examples show us renovating, almost born-again forms, in which some things in common can be recognized. This was especially the case when we received examples of handwriting from the period before the onset of alcoholism. This was particularly informative

ALCOHOLISM AND HANDWRITING

Thea Stein Lewinson

Translated by Robert Wall

ABSTRACT

This is a preliminary study based upon handwritings from Alcoholics Anonymous. The author found common characteristics associated with extremes in upper and lower zonal lengths, in breadth of letters, as well as disturbed rhythm of distribution and other factors. The handwriting samples based on material obtained before and after the drinking period illustrates a disturbed, sensitive self-image. Handwriting analysis provides a unique means for demonstrating the development of conditions during the course of this disease.

PROLOGUE

Alcoholism and handwriting is an unusually difficult topic. The best proof of this is that there is virtually no literature about it; at any rate, I have been unable to find any in America. Nothing on this topic has appeared in any of the German journals in the last five years. A colleague in New York kindly sent me some handwritings of alcoholics and wrote: "If you can find something in common in these samples... please inform me. I can find nothing." As mentioned, the problem is not so simple.

I work in Washington with a psychotherapist, Dr. J. Martin Keehner, who specializes in alcoholism and drug addiction, and is in close cooperation with Alcoholics Anonymous. He provided me not only with script material, but also with items of information about alcoholism, which are absolutely essential for the understanding of these scripts. I must ask, therefore, that you show some patience with me, if I discuss something of alcoholism in its latest concept before I move on to the analysis of the handwriting samples. However, I should like to say something in anticipation.

1. The handwriting examples are so diverse in form that it appears impossible to find something in common.
2. The handwriting examples often deteriorate to such a high degree during the period of acute alcoholism that one can scarcely find anything characteristic in them.

Through Alcoholics Anonymous we work principally with recuperating alcoholics, from whom we obtain examples of handwriting. These examples show self-renovating, almost born-again forms, in which some things in common can be recognized. This was especially the case when we received examples of handwriting from the period before the onset of alcoholism. This was particularly informative

with reference to the writing of recuperating alcoholics, as the latter reveals personal characteristics which possibly indicate things which they have in common.

Of course, handwriting is once again the best medium to show developments. We have sufficient examples of handwriting to draw tentative conclusions, whereas it would not be sufficient for statistical research. We were able to establish a tentative graphic syndrome which will possibly undergo still further modifications in the future. It is interesting to see that we are apparently dealing with extremes, and a change from one extreme to another in these samples.

Now for some facts about alcoholism. Alcoholism is a constitutional disease like diabetes and requires special treatment. But in contrast to other specific diseases there are a conglomerate of aspects which have to be taken into consideration. These include the organic, emotional, social and mental aspects of the personality.

The chemical substance ethyl alcohol is not adequately metabolised in alcoholics, and this special condition may be inherited. The hypothesis is that not all persons who inherit this condition become alcoholics. We believe that the emotionally disturbed and the emotionally immature resort to alcohol when placed under stress and in a crisis in order to cope with life. (Other people with different conditions become psychotic or develop an organic illness, etc.). Alcoholics are the people who become physically and psychologically addicted, and the removal of the physical addiction alone does not lead to a complete cure. The examples of handwriting will illustrate this point, later.

Dr Keehner has kindly placed at our disposal the following declarations about alcoholism:

INTRODUCTION

Today there is perhaps no other harmful condition which affects so many people, the origin and explanation of which is more argued about than alcoholism. Tragically, alcoholism has been and continues to be most often basically misunderstood. The Roman philosopher Seneca expressed the following opinion: "Alcoholism is nothing other than a deliberately accepted condition of mental illness." Even today the alcoholic is regarded as a dubious character or someone who has a moral problem.

PURPOSE

The purpose of this study is to illustrate the dynamic aspects of the disease and to explain the psychological tendencies by analysis of the handwriting. This should serve as a support and an aid when writing a basic and all-embracing description of alcoholism. It is to be hoped that this will lead to a more effective treatment of the illness.

HISTORY

The consumption of beer and wine dates back to 3,000 B.C., but distillation was not discovered until 800 B.C. And this is the process by which the strongly effective alcoholic drinks are produced which today are for sale in ever increasing quantities. It has been estimated that in the United States 100 million people drink alcohol and that there are approximately 20 million alcoholics (plenty of scope here for research into handwriting!).

In the last ten years there has been a considerable increase in alcoholism in young people, and also alcoholism is rising in women (Davidson and Neale, 1982). The number of suicides amongst alcoholics is also much higher than in the rest of the population. One third of the remaining suicides had alcohol as a contributory factor. According to some estimates the consumption of alcohol is also a contributory factor in at least 25,000 fatal accidents on the motorways. And, it appears that more than half the number of murders are committed under the influence of alcohol.

In the USA alcoholism is listed as the second most common cause of death. The annual cost to the economy amounts to tens of millions of dollars, but the sum granted annually towards research amounts to approximately 9 cents per patient. Until 1935, when Alcoholics Anonymous was founded, alcoholics either died or were committed to mental institutions... and even today not all alcoholics are rehabilitated; most have to arrive at a state of complete confusion before they seek and undergo suitable treatment.

Carl Gustav Jung said to one of the founders of Alcoholics Anonymous, "You have the mental constitution of a chronic alcoholic. I have never seen a single case reproduced in which this mental constitution exists to such a high degree as in yours. Yes, exceptions to cases like yours have occurred - twice in the past."

Now and again alcoholics have had so-called religious experiences. They appear to be unusual phenomena as significant emotional displacements and new cognitive arrangements. Ideas, emotions and attitudes which were the main focus in life of these people are suddenly sacrificed and a completely new group of attitudes and motives begin to rule them.

The Alcoholics Anonymous organization has spread over the whole world so now there are millions of recuperating alcoholics. The Medical Association has declared alcoholism a disease, treatment centers have been founded, but the number of relapses is still very large. In the opinion of Dr. Keehner it is partly due to the lack of an understanding, comprehensive treatment. And the reason for that is partially the shortage of a basic theoretical understanding of the disease. This is where handwriting analysis can be supportive.

In the attempt to understand alcoholism a distinction must be made between the conditions which have driven people to drink, and conditions which develop into addiction. An alcoholic who can not after all give up drinking does not explain why that person actually began the habit in the first place. Those who wish to describe alcoholism, usually do it with either psychological or physiological theories.

THEORIES

Most psychoanalytical explanations point to the main cause as a fixation on the oral level. Another psychoanalyst's opinion regards excessive drinking as a defensive mechanism designed to diminish the emotional conflicts or a deep-lying guilt. The theory-formers of the learning method regard excessive drinking as a means of lowering stress and as an acquired reaction, which is developed and maintained because it reduces stress.

As alcoholism is a physiological conditioned addiction, some theorists attempt to point to physiological factors as to why some people develop a drinking habit which leads finally to alcoholism.

From these theories one can deduce two clear definitions; one behavioral and one physiological. Davidson describes alcoholism as a disruption of behavior characterized by continued and excessive consumption of alcoholic drinks, which impairs not only health, but also social and business functions, and creates a physiological dependence on alcohol. On the other hand, Mullan, also a psychologist, describes alcoholism as a chronic mainly inherited disease, which gradually continues from an early physiological susceptibility into an addiction, characterized by changes in the ability to resist physiological dependence and by the loss of control over the habit of drinking. The psychological symptoms are only secondary compared with the physiological image of the illness and have no importance for the beginning of the illness.

If we now look at the strongly contrasting definitions of alcoholism then one can understand why there is such a large discrepancy in the treatment of alcoholics. Perhaps one can also understand why we find such a large number of relapses. One thing is certain - that is that Alcoholics Anonymous is successful in helping many alcoholics recover. They combine the *physiological and psychological* definitions by defining alcoholism as a compulsive behavior and as a physical ailment; but they emphasize more in the mind than in the body, and that often a spiritual or religious awakening takes place prior to the cure.

HYPOTHESIS

1. The handwriting of alcoholics should show characteristically distinctive peculiarities. The interpretation of these peculiarities could perhaps contribute towards explaining tendencies which turn an individual to drink and ultimately lead him to complete dependence on alcohol.
2. The handwriting of a recuperating alcoholic should show that the originally discovered peculiarities become not so predominant and possibly more modified.

METHODS

Handwriting is one of the few methods with which one can undertake longitudinal studies relating to personality and attitudes of a person. Handwriting appears especially suited to studies regarding the personality structure of the alcoholic. For example, an examination can be made of the premorbid personality which can show that certain tendencies do exist which may undergo a characteristic change during and after the outbreak of the illness. As already mentioned our material is not very plentiful and therefore we wish to describe this study as merely an exploratory investigation. We can, however, establish hypothetically some common tendencies and demonstrate characteristic developments.

GRAPHOLOGICAL SECTION

At this point I should like to mention in advance that we are dealing, psychologically speaking, with a disturbed self-image or with a disturbed self-assessment. Therefore I should like to indicate the graphological characteristics which relate to the Ego or the self. These include:

1. The height of the middle zone as an expression of self-importance. This serves as the standard for all other characteristics.
2. The breadth or the narrowness of the letters which portray the feelings of self-confidence.
3. The relationship of the upper and lower lengths in relation to the middle zone portray the strength of personal endeavor and the degree of personal ambition — how much or how little the writer reaches out and projects himself into the world.

In the distribution of his writing over the writing surface a person uses a lot of space or a little space — in other words, the relationship of the person to his environment, which can be harmonious or disturbed.

Furthermore we examined the qualities of the stroke for the basic disposition or substances of a person, and of course the rhythm and its interruptions of the written image as a whole which provides us with the answers about the dynamism of the personality. As you will see, and as I have already mentioned, we are dealing here mainly with extremes and the change to extremes.

At first glance the handwriting material looks just as variegated as the psychic problems with which the psychotherapist is confronted in his first appointment in that it appears almost impossible to discover something in common. At first we found that there were apparently extremes in the middle zone of the handwriting — either very large or very small middle zones, or an alternation between both extremes. Furthermore, we discovered that in the same situation the relationship between the upper and lower lengths is also emphasized as small or large. Here we have a handle; the middle zone is the realm of the Ego or of the "I".

massive curators, mostly. Lately
the sense of a loss of who I
appeared to the nature of things
my relationships with my family-
am, but sometimes not why!

1. Male, 40 years. Narrowed letters and extremely tension evident.

Ho sorry to hear you are hav-
ing trouble in your house, my wife
told me about the pipes etc
Sorry I wasnt around to help you
I know it has been very cold there

2. Disintegration of middle zone.

I see anyone Seffer, or Kurt
 jobs are to either help
 maybe they'll like me
 in a people place. I'd
 to really love someone -

3. Male, 36 years. Large wide letters.

Abb. 3: Männlich, 36 Jahre, große Buchstabenbreite

"you can see his serious
 he seems to always be happy
 pissed me off, cause it
 that no one can be happy
 the time, he doesn't like
 to be liked. he seems to want
 what people don't like about
 n. whether this is so he can improve.
 or not id dont know

4. An example of disturbed rhythm of distribution.

In most methods of graphology the middle zone is the kernel of the script which expresses the hub of the personality. In the measuring methods usually the standard measure of all other characteristics is related to the middle zone. If we now find extremes in this basic characteristic then we must accept that there is evidence of a basic disturbance, which apparently affects the nucleus of the personality. Likewise, we can also accept that the level of expectation of these writers moves from one extreme to another — either very tiny and slack, or exaggerated and tense. And this slackness or tenseness can also be imparted by the stroke.

The disturbed Ego with its unequal writings — at any rate, is found in most of them. Hence the different effects now affect the handwriting. Most of these writers choose lined paper, apparently in order to find a support for their otherwise very disturbed writings. Nevertheless, one can notice that the rhythm of distribution of the words not only often illustrate extremes, but also strong irregularities. These can show that the conception of harmony and proportion is disturbed.

The writer has no sense of order, distribution or harmony. It can be conceived therefore that a person lacking this balance has a particular disposition for moving to extremes - or alternatively to excesses.

The next characteristic of interest in these specimens of handwriting is the breadth of the letters. Usually we find a mixture of very narrow (covered letters) and very broad, often almost inflated letters, and very strong contrasts as well. As the breadth of the letters basically expresses the strength of a person's self-confidence, we also find stress between feelings of inferiority and considerable self-esteem. Of course, many men have fluctuations in their self-esteem, but these discrepancies in such an outspoken measure make it understandable that there exist here great possibilities for problems with the environment. Either these people wish to withdraw from their surroundings and isolate themselves, or they push themselves without reserve to the forefront and assert themselves.

A characteristic, apparently common to all these handwritings is the thin stroke (apart from in the not readily discernible writings which are written with a felt pen). One could say that the stroke shows the quality of the substance of a person in the sense of the degree of his powers of resistance, especially in the psychic sense. The thin stroke portrays the sensitivity and vulnerability of a person, which he can alter during the course of his life, either consciously or unconsciously.

Sensitivity can be used artistically by some, while others attempt to protect themselves by other ways and means in order to negate it, as for example the alcoholic for whom alcohol represents a protection and a safety valve. Here in the thin stroke, which expresses not only basic sensitivity but also over sensitivity, we may possibly have one of the main causes for the difficulties experienced by these people and their search for means to overcome their discomfort.

The characteristics mentioned here can be regarded as common factors running through the handwritten material, although all of these characteristics will not always appear at the same time in all of the material. The remaining handwriting

characteristics very as in all average specimens of handwriting, especially in their formations. We find individual shapes, printed letters and naturally many school-taught shapes. This is where perhaps one of the difficulties in the interpretation of the handwritings of alcoholics lies.

We find no characteristic shape and the graphologist usually relies on the shape of the letters as a distinctive characteristic. The tension of the stroke changes from the greatest intensity to the greatest slackness, also in extremes. As lined paper is normally used, one can say nothing definite about the directions or the fluctuations of the lines. Fluidity to the left or the right would naturally follow the chosen letter types and does not show any special common tendencies. Perhaps we will find something characteristic in the degree of inter-relationships.

We find a lack of dominating inter-relationships not only in the printed scripts, and likewise we often find complete inter-relationships. So one could describe the degree of inter-relationships as a secondary common characteristic in the writings of alcoholics. If one chose the emotional interpretation of this characteristic, then one could say that these people either live as isolated and withdrawn from society or that they project themselves in society in the same way with no outside contacts, in order to find relief for their discomfort.

The strength and direction of pressure varies greatly, so that here also no common factors can be established. What might be of significance, however, is that we cannot at any rate observe in these specimens any extreme pressure strengths. These are specimens provided by people from a middle class and educated level, who are partly even in a higher category. In a more primitive stratum the pressure of the writing could possibly show a stronger form of expression, and that in itself would also be the case during a period of alcoholism.

As a result of the above observations we can now experimentally draw up a graphic syndrome for the handwritings of these recuperating alcoholics:

PRIMARY CHARACTERISTICS

1. Extremes in the height of the middle zone.
2. Extremes in the extension of the upper and lower lengths
(usually upper lengths are smaller than lower lengths).
3. Disturbed rhythm of distribution.
4. Extremes in the breath of letters.
5. A thin stroke.
6. A tense or slack stroke (disturbed basic rhythm).

SECONDARY CHARACTERISTICS

7. Extremes in the degree of inter-relationships.

It goes without saying that we find disturbances of rhythm in this material from a small to a large degree. Nevertheless, we can find a few specimens with comparatively good rhythm. If we wish to interpret this syndrome, we could say that

these alcoholics have a disturbed personality nucleus (namely the Ego or the "I"), and this disturbance influences its actions and reactions. Either he is over ambitious and wants to accomplish more than he is capable of doing, or he withdraws, has no special ambitions and retreats to his own atmosphere.

There is an English expression, "He is either an over-achiever or an under-achiever." These people are either overambitious or completely indifferent when it comes to their accomplishments and goals. Great sensitivity allows these people to react strongly to their surroundings and they introduce various methods to protect themselves from harm.

These methods may not always be calculated, as their rational judgement is disturbed. The disturbance to the Ego causes an inferiority feeling as well as a feeling of excessive self-importance. In other words there is a lack of balance in the feelings of self-confidence. Such a person is under great tension and without any doubt he must experience difficulties with the people in his surroundings, especially those in his close vicinity.

Most of these people (at any rate in the material that we examined) as far as talent is concerned have a high intelligence, only they do not use it in a suitable way. It is true that they have control over themselves, but they feel very uncomfortable and are full of anxieties. Apparently, the desire to lose this control and to be free of unsettling feelings is one of the basic motives for alcoholism.

Our inclusive graphic syndrome takes into consideration the essential aspects of personality more so than the external formations. Perhaps it explains the complexities and variations of the handwriting material just as much as the various differences of the people who become alcoholics.

Although we had a limited population, we were able to obtain samples of these vulnerable and recuperating alcoholics dating from a time before they began to drink. This material was strongly informative as you shall see.

These scripts showed an over-strong regularity (you could say discipline) in almost all parts of the written image which often gave a feeling of being too rigid. Apparently all these people grew up under the influence of an over-strong super-ego or a very strong discipline. It was a compulsion, which they had to break through as soon as possible (in a crisis) and apparently by drastic ways and means, namely by drink.

One could raise the objection that many people grow up under the domination of a strong super-ego and that they do not all become alcoholics. But that appears to be exactly the crux of the matter. People with the above mentioned physiological condition and exaggerated sensitivity, whose self-feeling and self-esteem was destroyed, became alcoholics under stress. These are all our preliminary results. The development appears to lead from the regularity of handwriting to chaos and finally back to rebuilding.

During the period of heaviest drinking the handwriting naturally disintegrates in very different ways and to very different degrees. That is understandable, and everyone can see from his own handwriting what happens when he drinks a lot of

ears, I drank socially & to celebrate 10 years as described above.

Today I view myself as a person to grow spiritually and realize helping others & help myself

5. Example of emphasised lower lengths.

forty years old, living with him. I am a westerner, but I enjoy living in the UK. I like many things that see: the museums, the theatre, the water. I walk for

6. Male, 40 years. Strongly changing middle zone.

Drinking origins because of nervous problems, and to relieve these problems. Spiritual help and solution is essential. What has apparently been absent until now is a sufficient understanding of professional people for these psychological problems. The psychological examination in the form of tests or analysis of handwriting is necessary here to illustrate individual differences. Handwriting is

PLACES VISITED	
D Mrs. W.	Date <u>Sept 2nd during 1-71 soap</u> Place <u>opera while we travel</u>
<u>I one of</u> <u>the size as</u> <u>the last</u> <u>inches on</u> <u>buttery-</u> <u>sometimes</u> <u>to soft</u> <u>- are</u> <u>- on door.</u>	<u>to change our clothes</u> <u>Get the soap out of the bath</u> <u>taking off my glasses talk</u> <u>right saying things to me</u> <u>in very rapid Spanish</u> <u>in a very soft voice</u> <u>Only handle, make anything</u> <u>out. Just good for me</u> <u>lads. Went back to church</u> <u>Helped teach negative kids to</u>

7(a) Writing before the onset of a drinking period.

June of '71 immediately
before 1st drink.

Yellow sheet is from
August '85 just after
3rd anniversary in
Sobriety

7(b) As mentioned in text, shortly after 3rd anniversary of sobriety.

alcohol. There is an interesting experimental work by Tripp, et al. (1959). These psychologists gave a group of non alcoholics and a group of alcoholics gradually increasing quantities of alcohol.

The writing of the non-alcoholics, which had not previously been affected, showed more quickly disruption to their handwriting during intoxication. Whereas the handwriting of the alcoholics, who had previously shown definite disruptions in their handwriting, needed much more alcohol before their handwriting showed any changes.

Deliberately I will show only a few specimens of script during the drinking period, because it is my opinion that the samples before this time are more interesting (and psychologically more productive). Above all we can better explain the basic personality of the alcoholic, especially during the time of recuperation, and thereby make full use of the handwriting analysis of this important area of alcoholism. As usual, handwriting is, perhaps, the only means of establishing the structure of a person before the onset of the illness and watching the development of the recuperation process. But as already mentioned, we need much research work in this area just as in many other areas.

Alcoholics Anonymous had a so called 'Big Book' as its guide and bible. After I had finished my work in so far as it can be finished, Dr. Keehner gave me several quotations from the 'Big Book', some of which gave explanations and others of which lent support to my results.

Although we cannot prove it, we believe that the initial drinking in the drinking career of the alcoholic could be ended very quickly. But the difficulty is that only a few alcoholics have the desire to give up drinking as long as there is time. It is an opinion that the reason why the alcoholic drinks is the desire for freedom and flight, the fulfilment of which is promised by alcohol. Before the onset of alcoholism these people are usually compulsive and very inhibited. Then comes a time when the alcoholic almost without exception is simply incapable of giving up drink without any self-insight. At certain times the alcoholic has no effective mental self-defense against the first drink. His defense must come from a mightier power. Most experts in this field agree that Alcoholics Anonymous has the best results in achieving cures for alcoholics.

As previously mentioned, there exists in the USA a movement which states that alcoholism is an organic disease and that psychic symptoms are secondary. If this is at all true, quotations from the Alcoholics Anonymous book should make the fact clear that alcoholism is not only an organic disease but also at the same time a psychic disease.

Drinking begins because of psychic problems, and to relieve these problems a spiritual help and solution is essential. What has apparently been absent until now is a sufficient understanding of professional people for these psychological problems. The psychological examination in the form of tests or analysis of handwriting is necessary here to illustrate individual differences. Handwriting is

*Movement is as much a function as color
Rule - should have 1/2 people all movement -
must disseminate between people. Average should
be 50%.*

8(a) Before the drinking period

Purpose

*The purpose of this paper is to show through
handwriting analysis the dynamic aspects of
the disease, and to elucidate psychological
factors which will help in writing a comprehensive
definition of alcoholism. I hope fully this will
lead to more effective treatment.*

8(B) After the drinking period. One should note the content of this text.

especially designed for such cases, because there is often material from the time before alcoholism available which can impart very important information.

The 'Big Book' describes very clearly, characteristics which we can find in handwriting:

Self-seeking and Ego-dependence which we consider to be the roots of most of the troubles. Driven by forms of self-deception, egoism and sympathy with oneself, we insult our fellow men and they pay us back in kind. They hurt us often apparently with their provocation. But as alcoholics we find without exception that we ourselves have often made decisions in the past which have later resulted in a situation in which we were hurt. We think therefore our difficulties were often the results of our own actions. They originate from within ourselves, and the alcoholic is an extreme example of how obstinacy can run wild, although he himself will not believe that.

Above all else, the alcoholic must be rid of his self-dependence. That is absolutely essential because it will kill him. God will help in this situation, and very often there is no other possibility of getting free from this self-dependence except with His help. Many alcoholics have countless moral and philosophical convictions, but they cannot live according to them, no matter how much effort they make. Nor can they make their self-dependence any less by their own strength. They must have God's help to do it.

More so than other people the alcoholic leads a double existence. To a large extent he is an actor. He shows his stage character to the world. He is a person who enjoys being with other people. He likes to enjoy a good reputation, but he knows exactly that he does not deserve it. (All these things are related to the self-image.)

Finally, the wisdom of the founders of Alcoholics Anonymous experienced the damage to the Ego of the alcoholic. To balance that out, they recommend a religious life. And this has proved to be successful for the alcoholic. It may not help immediately, but the alcoholic can remain sober by long constant work on himself by following the program laid down by Alcoholics Anonymous. If he then seeks professional help in the form of psychotherapy, he can come to a better understanding of himself and by so doing perhaps he can hasten the process of new self-orientation, that he is more in balance with the other aspects of his personality.

To conclude, I should like to say that I have attempted to analyze characteristic traits of the alcoholic from his handwriting and, by doing so, to open a new field for further research and application of the psychology of handwriting.

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BIOGRAPHY: Thea Stein Lewinson studied scientific graphology before World War II in Berlin under Martha Goldberg. Colleagues she studied with there included Werner Wolff. Thea has practiced graphology in Germany, France and the United States. Formerly Chief of the U.S. Government Handwriting Assessment Section, Thea's research includes work at New York Psychiatric Institute at Columbia University, Sarah Lawrence College and the National Institute of Mental Health. With over 65 publications in scientific journals and graphology textbooks in various languages, Thea is a frequent lecturer at International Graphological Congresses, and an Honorary member of the "Berufsverband gepruefter Graphologen/Psychologen, e.V." in Munich, an American representative of "La Societe Francaise de Graphology" in Paris, and a member of the "Schweizerische Graphologische Gesellschaft" in Zurich. One of Thea's most recent works is "Symbolism, Art and Handwriting" based upon her 1985 talk at the International Congress in Graphology in Jerusalem and published in *Experiencing Graphology*, Freund Publishing House, Tel Aviv, 1989.

THE PRECONSCIOUS IN HANDWRITING

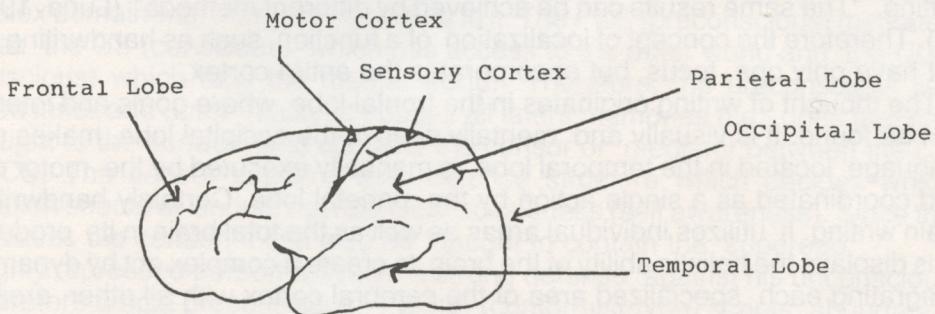
Marc J. Seifer

ABSTRACT

The preconscious is a complex theoretical structure located between the Freudian conscious and the unconscious. It is a realm that encompasses latent memories, the censor, the defense structure, symbolic behavior and the automatism. Graphologically, preconscious automatisms can be seen as habitual psychomotor movements and/or as written symbols. These, in turn, have neurological and psychological counterparts. Handwriting crosses that borderland between thoughts and physical expression. The enclosed paper explores the nature of this crossover.

BRAIN WRITING

In the 1890's William Preyer, a German professor of physiology, compared the handwriting of individuals when the pen was held by the hand, the foot and even the mouth. Preyer noted marked similarities in the form and structure of each sample and concluded that "hand" writing was really "brain" writing as it was centrally organized there. Since Preyer's times, it has been found that the organization of each of our psychophysiological functions are localized in different areas of the brain. Handwriting, although a unified procedure, is also made up of component parts. As a psychomotor procedure it utilizes each of the following lobes of the cerebral cortex for different purposes:



FRONTAL LOBE, situated in the forehead, is involved with all higher thought processes including reasoning and abstract ability. It mediates intentional and/or other conscious activities and therefore analyzes information from all other areas of the cerebral cortex.

MOTOR AND SENSORY AREAS: Midway between the frontal cortex and the occipital lobe lies the giant pyramidal cells which are involved with movement. The motor areas contain motor neurons which direct the movement from the brain to the muscles of the hand. The sensory pathway takes the information from the hand and brings it back to the brain.

OCCIPITAL LOBE is also called the visual cortex. Located in the back of the brain, the occipital lobe contains the projection area for all visual data. Dreaming produces EEG activity on the occipital lobe as well. The process of mentally or physically visualizing letters is carried out by this area of the brain.

TEMPORAL LOBE, situated on the side of the head above the ears, analyzes acoustical data as well as verbally related procedures involved in reading, talking and thinking. The left temporal lobe contains the speech center whereas the corresponding right temporal lobe contains the music center.

PARIETAL LOBE is involved with eye/hand coordination, spatial organization and simultaneous synthesis. During the act of writing this area coordinates input from the occipital and temporal lobes, thereby aiding integration of the seeing and mentally "saying" of words and letters as one writes.

THE PSYCHOPHYSIOLOGY OF HANDWRITING

The well known Soviet neurophysiologist Alexander Luria tells us that for a movement to take place there must be constant corrections and thus, a feedback loop between sensory and motor areas. Every movement has the character of a *complex functional system*. This "system" is dynamic and flexible. Its holistic structure accounts for Preyer's discovery of the similarity of hand, foot and mouth writing. "The same results can be achieved by different methods" (Luria, 1973, p. 28). Therefore the concept of localization of a function, such as handwriting, does not have only one focus, but incorporates the entire cortex.

The thought of writing originates in the frontal lobe where goals and intentions can be found. It is visually and mentally seen in the occipital lobe, makes use of language located in the temporal lobe, is manually executed by the motor cortex and coordinated as a single action by the parietal lobe. Certainly handwriting is brain writing. It utilizes individual areas as well as the total brain in its production. This displays the holistic ability of the brain to create a complex act by dynamically integrating each specialized area of the cerebral cortex with all other areas.

During ontogeny writing initially consists of complete expanded series of manipulative movements which gradually become condensed and have acquired the character of mental inner actions. As a rule they are based on external aids such as language [and other forms of social interaction].... They are mediated by them and cannot, in general, be conceived without their participation. (Vygotsky in Luria, p. 30)

This is why mental functions as complex functional systems cannot be localized in narrow zones of the cortex or isolated cell groups, but must be organized in systems of concertedly working zones, each of which performs its role in complex functional systems and which may be located in completely different and often distant areas of the brain. (Luria, p. 30)

Stated differently, Werner Wolff (1948) tells us that "an individual's movements are not the result of specific muscle groups.... There is a reflection of inner relationships" (p. 21). Handwriting reveals intra-cerebral coordination, but handwriting is even more than brain writing.

MIND WRITING

Handwriting as a phychophysiological mechanism, reflects the organization of the physical brain, as well as the psychology of the mind. On the biological side, it expresses various neurological mechanisms, expressions of the various lobes of the cerebral cortex, hemispheric dominance, influence of the mid-brain, brain stem, endocrine system and so-forth; on the psychological side, it displays conscious, preconscious and unconscious aspects of the psyche. Handwriting lies on that magical borderline between mental reality and physical actuality. The will, which is related to intentional aspects of the instincts and ego, also lies on this border. In a derivitive or Jungian sense, handwriting as a symbolic expression also reveals the personality of the species. Just as mind interacts with matter through the brain, thoughts are transcribed into physical reality through handwriting.

THE PSYCHOLOGY AND NEUROPHYSIOLOGY OF THE PRECONSCIOUS

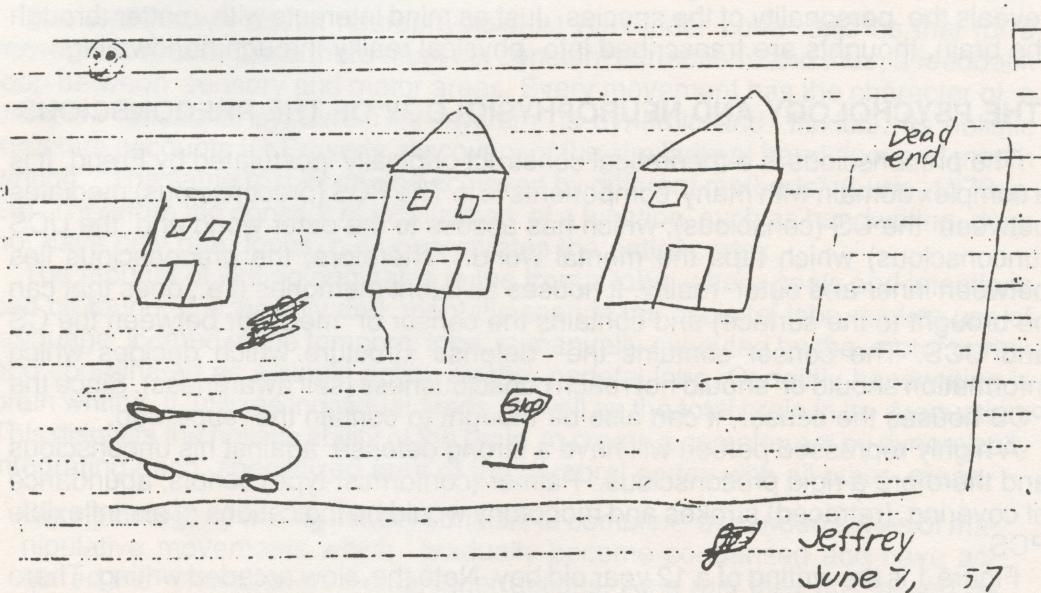
The preconscious is a theoretical construct originally postulated by Freud. It is a complex domain with many components to it. The PCS (preconscious) mediates between the CS (conscious), which has access to the outer world and the UCS (unconscious) which taps the mental world. Therefore, the preconscious lies between inner and outer reality. It houses all latent memories (i.e., ones that can be brought to the surface) and contains the censor or mediator between the CS and UCS. The censor contains the defense structure which decides which information should or should not reach consciousness (self awareness). Since the PCS houses the censor, it can also be thought to contain the superego.

A highly repressed person will have a strong defense against his unconscious and therefore a rigid preconscious. Palmer (conformist-type) scripts, abundance of covering (retraced) strokes and monotony would be indications of an inflexible PCS.

Figure 1 is the writing of a 12 year old boy. Note the slow arcaded writing. There is an overabundance of covering strokes as well as extreme slant to the right. This is the writing of a repressed young man who is afraid to be alone or think independently. His censor, which is housed in the PCS is symbolized by the Stop

I am Jeffrey ^ Now I'm taking a handwriting test to judge my abilities. I attend Lawrence Junior High. Next year I'll be in the High School. Then I will enjoy many activities and clubs.

I am Jeffrey ^ Now I'm taking handwriting test to judge my abilities. attend Lawrence Junior high. Next year I'll be in the High School. Then I enjoy many activities and clubs.



1. The handwriting, printscript and drawing of a 12 year old boy. Note how repression is expressed in three different ways.

sign and by the Dead End in the drawing. His creative unconscious is being guarded too strictly by a strong defense structure. However, although the drawing lacks imagination, and the writing appears monotonous, the printing shows some flexibility and independence of thought noted by the simplified capital I's and by the rebellious disregard for i-dots. One would have to guess that this boy is in a transitional stage and that his censor, although strict, does enjoy some flexibility. There is a clear battle here between pressures to conform (top handwriting) and a tendency towards individual expression (bottom).

CONSCIOUS, PRECONSCIOUS AND UNCONSCIOUS IN HANDWRITING

CONSCIOUS. The conscious (CS) has two functions. It is an organ of awareness, and also it is an apparatus that gives the unconscious (UCS) access to motility (i.e., to the physical body). Consciousness as a process is actually, for Freud, a function of the UCS. Thus, in an ironic sense, Freud's unconscious is linked to intentionality and self awareness through its conscious apparatus. One can be conscious of inner or outer states as well. The more conscious (CS), the more one is aware of and makes use of the unconscious (UCS), but also, the more purposefully one's fate is directed. The layout of a page of writing and the general direction of the total movement is a conscious procedure. Slow scripts are more self conscious than faster ones.

PRECONSCIOUS. All memories that we can remember are in the preconscious (PCS). The PCS also houses the censor and thus the defense structure. For this reason, the preconscious is the repository of the automatism (explained below) and corresponding prelogical behavior patterns.

UNCONSCIOUS. The unconscious (UCS) houses all memories we cannot remember either because they are forgotten or because they are repressed. At the same time, Freud tells us that the UCS is the TRUE PSYCHIC REALITY. Our real self (e.g., our soul) is hidden in the unconscious. Consciousness can be thought of as one of many functions of the all inclusive unconscious. In the same sense, the PCS is actually also part of the UCS. The UCS is everything, but it has PCS and CS aspects to it. The UCS continues to think during the day while consciousness naively considers the UCS to lie dormant. We as graphologists and as psychologists know that the UCS contains a great percentage of one's motivating impetus.

All that is repressed is in the UCS. It is through the preconscious (PCS) or the censor that UCS thoughts must pass in order to reach either self-realization or self-expression. In Freudian terms, this release of unconscious energy is called a HYPERCATHEXIS. It is the function of the censor and defense structure to COUNTERCATHECT or oppose the release of this energy. While the censor is asleep at night, these repressed thoughts tend to surface although they are still distorted by the weakened censor; but since consciousness tends also to be

asleep, most dreams, although released through the CS apparatus (i.e., hypercathected), are barely and rarely consciously perceived. We tend to remember a small percentage of our dreams.

CS and PCS movements are learned, but the overall pattern of movement is neither CS or PCS.

We can not bring to consciousness why we incline a certain letter, why we put the dot over the i in a certain place, why we emphasize a curve.... While the direction of the total movement is CS and single steps are PCS, its form and quality are UCS. (Wolff, 1948, p. 3)

In order to fool the censor, the UCS may use defense mechanisms such as displaced aggression, denial, rationalization, reaction formation and intellectualization. During the day, this tendency to circumvent the censor and release tension may result in prelogical or symbolic behavior patterns, e.g., quirks. At night, when the censor is weakened by sleep, the repressed material may be disguised by various primary process maneuvers during dreaming, e.g., substitution, compression or representation by the opposite.

Figure 2 is that of a left-handed 26 year old successful comedian. It is replete with symbolic psychomotoric expressions stemming from the preconscious. At the time of this writing, two years before he actually established himself, there may have been some displaced aggression or feeling of competition towards myself. This is evident in the heavy pressured downstroke of the M of Marc. Bob was just starting out in the entertainment business at this time and wanted to control his ego drives. His hidden or disguised need for recognition is evident in many of the lower case i's which force themselves into the upper zone, i.e., they become disguised capital I's. Bob wants to be humble, so the displaced ego drives, evident in the handwriting, are also evident in his controlled discussions concerning his rise in the entertainment profession. The angular lower loops seen especially in the letter "g" at the bottom of the page, relate to his rebellion from the ways of the parents as well as to his aggressive sexual humor. The rhythmical integration and emphasized rightward trend reflects his conscious motivation to succeed in a difficult field, and the aesthetically pleasing pattern is reflective of a dynamically creative unconscious.

Figure 3 contains an analogous type of prelogical or symbolic psychomotor movement in that the writer tries to emphasize the ego without doing it overtly. Both sections of this sample are part of the same four page letter. The top part is the second page. Note the curious G-like e's throughout this sample, and their total absence in the last more spontaneously written page. Her signature, Margi, is pronounced with a hard G sound. And so the G-like e, although chosen consciously for aesthetic reasons, was actually intrinsically motivated by unconscious ego drives.

It is an inventive letter, but also it is a disguised pat on the back. Due to the multidimensional nature of symbols, this letter also displays a creative uncon-

More:-

Thanks for taking the time
to write out a piece - but
I can't use it - I'm working
in the direction of developing
characters in set pieces or
chunks of material -

~~What you wrote has the tone
of Groucho or Shtrich, and
I'm moving in a different
direction.~~

I'll try to get out a
cassett with a few bits on
it to give you a better
idea of what's working -
Hope the studies are
going well -

Bob -

2: The handwriting of a left-handed comic, note lower forms and rhythmical integration. The word of lines up diagonally down the page and this same automation can be found in his signature.

energetic at all

p. 1

is so intrinsic I'm surprised at
your choice of the word "energy":)

Whether I ~~can~~ keep it inside is
up for consideration. But I think
you're wrong. Whatever energy I
have, I think it is my decision
to exercise it - and I feel I
have done my share of that this
year. I think Pittsburgh will not

p. 4

I am skeptical about your
future plans but I feel it's not
my place to advise.

I'm going to Carnegie on the
4th. My address will be
Morewood Hall, ^{Room} 2-D-4.
Carnegie-Mellon University, Pittsburgh
Penn. 15213. Have a good rest
of the summer -

May:

3: Note how the g-like e's change back to the standard form by the end of the letter. The letter g is also prominent in the signature.

scious which serves to express her individuality, while also circumventing preconscious defenses involving feelings of inferiority. Note also the overly large capital I's. This young lady is an identical twin and clearly needs to assert her uniqueness. In attempting to adapt this G-like e into her writing, Margi is trying to produce a totally spontaneous graphic pattern. But it is a fad, and the attempt will be unsuccessful because of its contrived nature and her inability to maintain false airs throughout the duration of the text.

THE AUTOMATISM

Besides housing the censor and latent memories, the PCS, in physiological terms, also contains the automatisms which are learned responses that develop after practice. These habits or gestures contain our idiosyncracies, and also our individuality. They display how the person mediates between conscious, spontaneous and/or inhibited psychomotor movement patterns. A certain "trust" of unconscious processes and instinctual mechanisms are required in the development of PCS automatisms. They are learned responses which are developed through practice over time.

Just as we are unaware of single steps made by our moving feet, and just as we do not plan the movement of our typing or piano playing hand, so we are unaware of single writing movements.... They are automatized and function almost without direction of the details.... Our impulse is: get this object, walk to that goal, play this music.... How the general command which we give ourselves is fulfilled usually lies beyond our attention... but these single movements can be brought into consciousness — what is PCS can be made CS. (Wolff, 1948, p. 3)

Wolff goes on to say that we are preconscious of each step of the writing, but that CS and PCS movements are learned. The PCS develops over time. Since it houses the censor (which is guided by the superego), the PCS is under the direct influence of the demands of the environment. For example, if the society suggests that "one should not be egocentric," the UCS and id forces could influence the PCS to emphasize egocentricity through a disguised fashion. Graphically this is seen as large lower case i's in Figure 2, and the G-like e's in Figure 3.

Automatisms are mental as well as physical expressions. They are adapted for efficient operation of our bio-psychological machine.

Physiological automatisms facilitate the transformation and the saving of energy. The success of many complicated achievements in central mental regions depends on automatization. Purposive achievements depend on some functions taking a flexible form, others an automatized form, and still others combining these two forms in various proportions. The ego must also be able to encompass automatized functions altered immediately [as Margi's G-like e's try to do] and without transition by a mere decision of will. However,

the disturbances caused by interrupting automatisms and compulsions are similar, but so are those caused by interrupting ego-syntonic drives. (Hartmann, 1952, p. 91)

Wolff helps explain the end of this quote in regards to writing:

It is possible that automatization functions as a stimulus barrier in the mental apparatus.... Automatisms, like other mental phenomena may be said to be under the control of the external world.... Automatization is characteristic of relatively stable forms of adaptedness which are the lasting effects of the adaption process. (Hartmann, p. 91)

Figure 1 shows its arcadedness and adherence to the Palmer method. These automatism are certainly stimulus barriers preventing individualized expressions whereas the ego-centric automatism in Figures 2 and 3 are actually displaying a breakdown of the perceived demands of the environment in order to satiate the demands of the UCS ego drives.

Figure 4 displays the ability of the PCS to mediate between the demands of inner needs versus outer reality. The upper writing is the one this 19 year old girl usually uses. Note the Palmer script, beginning strokes and arcadedness. This script obviously shows conformity to the demands of the environment.

The lower writing is just something she "fools around with"! As soon as the demands of the inner (true) self emerge, the entire structure of the writing and also the cerebral organization changes and new automatisms appear. Beginning strokes are abandoned, angles replace arcades, loops are dropped and original forms appear. This girl's PCS defense structure is one of suppression rather than repression. The upper handwriting now can be seen to display coping mechanisms rather than unconscious defense mechanisms. Her automatization displays an adaptable ego which has not yet decided to truly align itself with the individualized personality which is seeking unfoldment; but rather she hides her originality because of her perception of the repressing demands of a conforming society. Her PCS adapts both to the demands of society and that of the self, and has not allowed one to rule out the other. Graphologically we can, of course, see that with a disciplined yet flexible mind, the demands of the self yield a much more creative expression, the lower handwriting displaying more advanced automatization.

Automatisms are highly important in understanding the economical structure of the psyche for they allow one to think and write at the same time. Their central organization must therefore lie in the parietal lobe which, we remember, deals with simultaneous synthesis. (More deeply ingrained ones, e.g., walking, bike-riding, step-climbing, are also reprogrammed in the cerebellum, a lower brain center; see Seifer, 1989 for further discussion of the role of mid-brain and brainstem mechanisms in the organization of handwriting.)

Now is the time for all
good women to come to the
aid of their sisters.

Fran Weiszraub

Now is the time for all good
women to come to the aid
of their sisters.

Fran Weiszraub

4: The writer stated that the top sample was her "normal" handwriting. Note the numerous positive changes in the lower script.

As the child develops any type of complex conscious activity, at first it is expanded in character and requires a number of external aids for its performance [such as mouthing the letters and words to the self as one writes].... Not until later does it gradually become condensed and converted into an automatic motor skill....

For example writing starts out as a chain of isolated motor movements, but with practice the process is radically altered and writing is converted into a "kinetic melody" no longer requiring the memorizing of the visual form of each isolated letter or individual motor impulses for making every stroke....

Similar changes take place also during the development of the higher psychological processes which changes, also, naturally, its cerebral organization.

The participation of the auditory and visual areas of the cortex, essential to the early stages of formation of [this] activity is no longer necessary in its later stages and the activity starts to depend on different systems of concertedly working zones. During ontogeny it is not only the structure of higher mental processes which changes, but also their relationship with each other, i.e., their interfunctional organization. (Luria, p. 31)

Luria is stating that a beginning writer such as young child, organizes his writing in different areas of the brain than mature, practiced writers. Automatisms reflect a special interfunctional organization and integration of the cerebral cortex so that in order to adapt a new letter into the script, as Margi tries to do, there is actually a cerebral restructuring and regression back to a former model of operation until the letter becomes fully automated and thus is produced subconsciously.

The use of automatisms displays the hierarchical nature of the cerebral cortex. As the formation of a letter becomes a preconscious procedure, the conscious is freed once more so that more intricate forms of thinking can take place while writing, e.g., one can think about the content of the page rather than how each letter or word is formed. The variations and inventiveness of the automatisms can also display a dynamically flexible cerebral cortex, one that is able to shift gears and learn to deal with its deeper strata.

The paradox is that although automatisms are consciously learned they reflect UCS processes because the CS is trying to learn how to produce the same movement unconsciously. Once automatisms are achieved, less energy is used in their creation (as in handwriting or playing the piano, etc.) and so consciousness can begin to operate on other levels while the PCS takes care of the rest.

KINETIC MELODIES

Luria states that signatures are automatic "kinetic melodies." They take an ideographic form and are so impressed in the psyche that they are no longer simply perceived by the language centered left hemisphere, but are actually transferred over to the more abstract, symbolically oriented right hemisphere.

Words, abbreviations and logos such as STOP, USA, GULF, NBC, ETC are also ideograms which are perceived holistically and therefore penetrate into deeper layers of the psyche. Because of their symbolic stature, they too are shifted to the right non-verbal hemisphere and are perceived as ideas or pictures rather than mere words. From this we can deduce that automatisms involve more abstract and deeper layers of the psyche and correspondingly use of the non-verbal right hemisphere (and also use of the left hemisphere's parietal lobe which is involved with simultaneous synthesis).

Automatization reflects psychophysiological restructuring and thus different use of the brain as a whole and also as the sum of its parts. Automatization develops through practice, but can act as a stimulus barrier if the demands of the environment prevents flexible use of the PCS. Automatisms also become ideograms, or symbols reflecting deeper layers of the psyche. Pictorially, through the PCS, they portray CS and UCS (repressed) desires and needs. This is because the PCS is influenced by the CS as well as the UCS. All handwriting is automatized; it is the degree of automatization, its rigidity or flexibility and inventiveness which reflects the dynamic interchange between the demands of the self (in the UCS) and the demands of the environment (perceived by the CS). The meeting ground is the PRECONSCIOUS. If we define the self as the EGO, it is the PCS aspects of the EGO which we are talking about.

SYMBOLISM

Written language, as an advanced form of human communication, developed out of the ancient cave drawings which were attempts by our ancestors to portray objects and important events from their lives. These, in turn, evolved into the pictoral hieroglyphics of the Egyptians, the less concrete forms as found in the Chinese and Hebrew alphabets, and the more abstract characters as seen in the Latin alphabet. Wolff (1948) notes that letters live beyond the individual and thus transcend time and space. "In ancient times, letters had a magic value and were considered symbols of conjuration from the innermost depths of existence." Writing displays not only intentional information, but hidden messages as well.

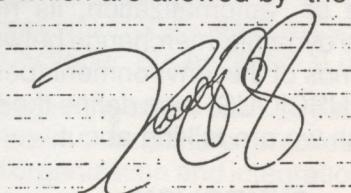
This relationship between the magical structure of the formation of the letters and the symbolic structure of man is explained by Klara Roman (1972):

We tend to perceive letters as having volume: three dimensional configurations standing upright like a man standing on the ground. This ground is symbolized by the implied baseline. For we speak of upright letters, in spite of the fact that they actually lie flat on the plane of the paper. This attests to something that projection theory has long recognized — man's tendency to project the self onto the object that meets the eye, and to invest this object with the tensions and emotional impulses actually operating in himself. In writing, this leads to an identification with the letter form, upon which the writer

- projects his psychic activity in the guise of images and symbolic gesture. (p. 137)

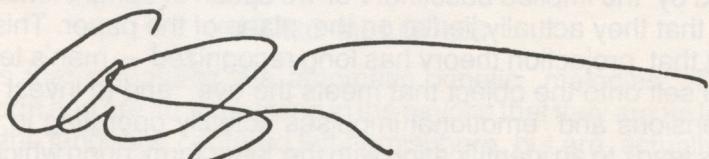
Symbols are expressions of intense emotional cathexes. "Through repeated occurrences... an entire train [of thought] may ultimately be concentrated into a single unit. This is a fact of compression of compensation" (Freud, 1938, p. 530) whereby, through a single gesture, a constellation of suppressed or repressed material can be hypercathected (i.e., released), and thereby expressed.

All language and writing is symbolic, as individuals tend to choose and create certain idiosyncratic psycho-motor configurations in order to satisfy the wants or desires of the CS, PCS and UCS. Symbols can reflect a unifying factor in the organization of personality. If conceived as "kinetic melodies" they display the physiological integrative function of the multidimensional cerebral cortex; if conceived of as psychological projections, they display the symbolic "nodal points" of whole trains of thought that Freud talks about. They are prelogical and/or preverbal compromises which are allowed by the censor to be expressed.



5: The spiraling handwriting of a famous astrologer.

Figure 5 is the signature of a famous astrologer who has written a series of textbooks on the topic. It's excessive height and roundedness emphasizes the highly sensitive nature of this 6'6" opera singer/newspaper editor/ professional astrologer. He is egocentric, outspoken, caring and oftentimes brilliant. But as noted in the knot-tied script, he is caught up in an inflated self image. He is future oriented and highly ambitious, but held back emotionally by unresolved problems from the past. Although the writer may have difficulty communicating his true self to himself, (as well as to others), he is empathetic (roundedness), and a knowledgeable guide in therapy. The abstract signature pairs well with the astrologer. The circular movements look almost like the spiraling progression of the earth as it goes around the sun, as the solar system progresses through the galaxy. The figure 8 supports the hypothesis of an ambiguous self-image. He really does lead a cork-screw life.



6: The handwriting of a creative artist.

Another giant figure eight is evident in the next signature, Figure 6. Both these men's accomplishments reflect the idea of an infinite potential, but the composite nature of the symbol tells the graphologist that the figure eight also points towards a certain ambivalence or difficulty in releasing the past, always tying it in, as the writer progresses into the future. This signature is that of an artist who was adopted at four and one half years of age. With this information the figure eight now seems to point to the mystery of his birth and a continuing concern regarding the womb from which he sprang.

If we compare both signatures, we find that both are illegible, use rounded forms, are rather large, abstract, and both utilize a large figure eight. Certainly, there are some similarities in their respective natures, as both are highly creative, warm hearted, self-contained and interested in metaphysics; however, it is also clear that the same or similar automatized habitual psychomotor patterns (i.e., symbols) will reflect different psychological trains of thought dependent in part on the experience of the writer and in part on some inner symbolic psychobiological need.

Doris
Should TAI call you Sylvie
Please give call to Ruth

7: The writer plays the violin.

The next signature, Figure 7, is a personalized initial for the name Doris. The heart-shaped lower loop relates to her warm personality and the flashy releasing upswing visually pairs well with the fact that she is a violin teacher. This ideogram, itself, looks abstractly like a musician moving his or her bow over the stringed instrument.

The next handwriting is that of comedian Jimmy Durante. Clarity of thought is evident in the simplicity of the script and in the fine spacing. Note what appears to be the symbol of his famous proboscis drawn spontaneously in the loop of the P of pleasure!

J Jimmy
This is a pleasure
My Very Best Wishes
Jimmy Durante

8: The pictorial handwriting of Jimmy Durante.

March 28, 1973

~~Dear Kitty~~

Many, many thanks for your
kindness -

Unfortunately, our plans were
altered at the last minute and I was
unable to attend, but you were
kind to think of me.

~~Stan~~

9: The automatism of the lateral stroke predominates in this script, even taking over the structure of the capital R in the signature. Note how these strokes synchronistically line up down the page thereby displaying an unconscious rhythmic configuration.

From my studies, I have come across many people who have favorite letters or diacritics or symbolic forms, and because of them whole written pages are preconsciously constructed to maximize their use. Oftentimes, they cluster or line up synchronistically down a page, or as Dan Anthony has noted, they create touchpoints with other rhythmically executed strokes. Werner Wolff's text DIA-GRAMS OF THE UNCONSCIOUS attempts to explore the tendency towards wholeness expressed in writing by measuring the symmetry, consistency, rhythm and periodicity of, in particular, the signature. Wolff coins the term "configuration" to stand for the unconscious harmonious arrangement of these various aspects of the writing. This configurating principle is unlearned. "Whatever the personality trends are which determine expressive movement, they seem to become configurated just as spread iron filings are configurated by a magnet" (p. 96).

Jung's hypothesis of the archetype, as a "formative pattern... [or] tendenc[y] towards [a] particular style... of life" is a concept linked to these ideas, as is his idea of synchronicity, or meaningful coincidence. Note how the word of in Figure 2 lines up exactly, diagonally down the page. Note also that the automatized pattern of this word is identical to the last two letters of Bob's signature. The capital I is another configuration which often lines up in touchpoint fashion down a page. This synchronistic configurating expression of the centralizing ego is also evident in Rick's signature, Figure 9, whereby the kinetic melody of the dash predominates. Note how it replaces both the curved part of the top of the capital R in Rick and the period at the ends of sentences. This lateral stroke also lines up precisely down the page along with other similar graphics such as the t-bar. Extreme precision of this tendency towards patterning is evident. This neurophysiological holistic propensity stems from very deep layers of the unconscious.

These archetypes, motifs or themes underlie the patterns of symbolism that belong to the process of growth in the psyche... the essence towards depth then is growth towards wholeness. (Progoff, 1968, p. 8)

Certainly this self-actualizing and unifying tendency is also evident in a different way in the signatures above, whereby the depth and scope of the person's existence is expressed as a stylized insignia.

The preconscious is a vast area of the psyche. It is not only a meeting ground of the conscious and unconscious, but also a repository for the symbols, automatisms, defense mechanisms and structure of the censor. As the first layer of the unconscious, the preconscious is a gateway to the deeper layers of the psyche.

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